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PERFORMANCE WORK STATEMENT
FOR
OPERATION, MAINTENANCE, AND REPAIR OF REAL PROPERTY
MILITARY OCEAN TERMINAL
SUNNY POINT, NC

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TECHNICAL EXHIBITS

TECHNICAL EXHIBITS

1. GENERAL INFORMATION.

1.1. Scope of Work. The Contractor shall provide all personnel, management, tools, materials, supervision, general and specialized equipment, clothing and other items and services necessary to operate, maintain, repair, and construct Real Property Facilities (RPF) as defined in this performance work statement (PWS), except as specified in Section 3 as Government-Furnished Property, Equipment, and Services, at the U.S. Army Military Ocean Terminal, Sunny Point (MOTSU), North Carolina. The Contractor is also required to perform limited work at sites other than MOTSU: Leland Interchange and railroad right-of-way, railroad signal sites, the Buffer Zone, and Fort Johnston military family housing, Southport, North Carolina. The Contractor shall perform to the standards in this contract. The estimated quantities of work are listed in Technical Exhibit (TE) 2, Workload Estimates. The functional areas covered under the contract are:

1.1.1. Maintenance Management Services (ref. SECTION 5.1).

1.1.2. Electrical Plants and Systems (ref. SECTION 5.2).

1.1.3. Water Plants and Systems (ref. SECTION 5.3).

1.1.4. Sewage Plants and Systems (ref. SECTION 5.4).

1.1.5. Buildings and Structures (includes Fire Alarm Systems, Heating, Air Conditioning and Refrigeration Systems and Installed Equipment) (ref. SECTION 5.5).

1.1.6. Grounds Maintenance (ref. SECTION 5.6).

1.1.7. Paved and Earth Surface Roads (ref. SECTION 5.7).

1.1.8. Pest Management (Pest Control) (ref. SECTION 5.8).

1.1.9. Wharf Maintenance (ref. SECTION 5.9).

1.1.10. Contractor Provisions. It is a mandatory requirement that the Contractor shall become acquainted with and complies with all Government regulations, present and future, applicable to the service function performed under this contract at the U.S. Army Military Ocean Terminal, Sunny Point, North Carolina. Questions pertaining to any part of the rules and regulations should be immediately directed to the Contracting Officer, and the Contractor shall immediately comply with the Government's response to any such question. Acquisition of DOD and Service publications is the responsibility of the Contractor. Section 6 list references used in this contract and their associated website location.

1.1.10.1. Mission and Installation Specific Regulations and Policies. In the performance of this contract, the Contractor is forewarned to pay special attention to the unique mission of MOTSU as it relates to, but is not limited to, fire prevention and response, ammunition safety, security, sanitation, possession of drugs and firearms or other lethal weapons.

1.2. Contractor Personnel.

1.2.1. Contract Manager (Key Personnel). The Contractor shall provide a Contract Manager who shall be responsible for the performance of the work. The Contractor shall provide a resume that describes the education, experience, and qualifications of the proposed Project Manager with his proposal. The Contractor shall provide a written notice to the CO at least one week in advance of any proposed changes of Project Manager and shall submit justification (including the name and rational for proposed change and how he/she will be phased in). No substitutions shall be made by the Contractor without the written concurrence of the CO. The Contractor shall provide the telephone number of the Project Manager within two weeks after contract award date.

1.2.1.1. Contract Manager Authority. The Contract Manager or alternate shall have full authority to act for the Contractor on all contract matters relating to daily operation of this contract.

1.2.1.2. Contract Manager Experience. The Contract Manager shall have a minimum of five (5) years of specialized experience in the supervising a team from various craft and/or trade performing similar jobs required under this contract.

1.2.1.3. Contract Manager Availability. The Contract Manager or alternate shall be available during normal duty hours within thirty- (30) minutes to meet on the installation with Government personnel (designated by the CO) to discuss problem areas. After normal duty hours, the manager or alternate shall be available on site within two (2) hours.

1.2.2. Contractor Employees. All Contractor personnel utilized in performance of the contract shall be legal residents of the United States. Personnel shall be able to read, write, speak, and understand the English language to the extent necessary in adequately reading and understanding regulations and instructions to complete and safely performing the contract services. The Contractor shall provide personnel to perform the contract requirements within specified time frame required by the contract and shall meet all variations, shift schedules and changes as may be required to respond to the requirements of the contract. All persons performing under the contract shall remain employees of the Contractor and not of the Government. The Government has the right to restrict employment under the contract of any contractor employee, or prospective contractor employee, who is identified by the CO as a potential threat to the health, safety, security, general well being or operational mission of the installation and its population. The Contracting Officer may require the Contractor to remove from the job site any employee for misconduct or security reasons. The removal from the job site of such person shall not relieve the Contractor of the requirement to perform.

1.2.2.1. Contract Personnel Identification and Appearance. Contractor personnel shall present a neat appearance and be easily recognized as Contractor employees. The Contractor shall provide each employee with a uniform (i.e.. pants and shirt) bearing the name of the corporation located on the left shirt pocket. Uniforms shall be worn by the Contractor employees at all times while performing work under this contract. Also, each Contractor employee shall wear a visible Government furnished identification badge when performing work under the contract.

1.2.2.2. Employee Conduct. Contractor personnel's conduct shall not reflect discredit upon the U.S. Government, the Department of the Army or MOTSU. The Contractor shall remove any employee for reasons of misconduct or security from the job site. The removal from the job site of such a person shall not relieve the Contractor of the requirement to provide sufficient personnel to perform adequate and timely service.

1.2.2.3. Employee Conflict of Interest. The Contractor shall not employ any person who is an employee of the United States Government if the employment of that person would create a conflict of interest, nor shall the Contractor employ any person who is an employee of the Department of the Army, either military or civilian, unless such person seeks and receives approval in accordance with DODD 5500.7-R.

1.2.2.3.1. Contract Personnel Status. The Contractor is cautioned that off-duty active military personnel hired under this contract may be subject to permanent change of station, a change in duty hours, or deployment. Military Reservists and National Guard members may be subject to recall to active duty. The abrupt absence of these personnel could adversely affect the Contractors ability to perform, however, their absence at any time shall not constitute an excuse for nonperformance under this contract.

1.2.2.4. License, Certifications and Registrations. The Contractor shall be licensed, registered and certified by the State of North Carolina, to provide services in all specified categories in this contract. Evidence of all licenses, certifications, and registrations required under this contract shall be submitted to the Contracting Officer with the Contractor's final bid and maintained in good standing for the duration of the contract.

1.2.2.4.1. Pest Control Personnel. The Contractor shall provide qualified personnel licensed in accordance with North Carolina laws implementing Public Law 92-396, Federal Pesticide Control Act (Public Law 92-396), Federal Insecticide, and Fungicide, and Rodenticide Act (FIFRA), to be physically present in each immediate work area where any pesticide or herbicide application is being performed. All Contractor insect and rodent control employees

shall be certified by the State of North Carolina for the application of pesticides, herbicides and fungicides in the operational categories required and their certification shall be maintained by the Contractor as required by the state law implementing the Federal Pesticide Act of 1978, (Public Law 92-396).

Minimum training standards required for Contractor Pest Control personnel and other Contractor personnel involved in pest control activities shall include satisfactory completion of training as recommended by the National Pest Control Association and shall have received the specific training in the following:

a.) Inspection procedures for pests to be controlled as identified in the contract.
b.) Differentiation of non-target species.
c.) The habits and life histories of pests to be controlled.
d.) Selection, application and evaluation of appropriate control procedures.
e.) Utilization of non-chemical control methods.
f.) Safe and effective application techniques in the calibration and use of all required equipment.
g.) Handling, storage, and transfer of pest control materials.
h.) Reading, interpreting, and following pesticide label instructions.
i.) Procedures for protecting food, food utensils, food preparation areas, and pets.
j.) Procedures for fire prevention during treatment.
k.) Use and maintenance of all required safety equipment.
l.)The consequences of preparing a pesticide to be given or sold to an individual other than an authorized employee of the Contractor, or regulatory official.
m.) Developing and giving instructions to occupants on precautions to follow before, during, and after rendering pest control service.
n.) Determining conditions conducive to pest infestations and making recommendations for the required improvements thereof.
o.) In addition, uncertified personnel shall be trained in:
    1.) Procedures for reporting and handling pesticide spills.
    2.) The security of pest control vehicles and equipment.
    3.) Recommending appropriate medical or veterinary attention for humans or pets with real or imagined pests.

1.2.2.4.1.1. The Pest Control Applicator shall be licensed in the State of North Carolina in Category 3 – Ornamental and Turf Pest Control; Category 8 – Public Health Pest Control and certified in Category 7 – Industrial, Institutional, Structural and Health related Pest (include P-Household Pest and W-Wood Destroying).

1.2.2.4.2. Wastewater Treatment Facility Operator Certification. The Contractor shall provide a properly certified Class II or higher Operator in responsible charge and a certified Class I Back-up Operator. The NC Water Pollution Control System Operators Certification Commission must issue certification.

1.2.2.4.3. Water Treatment Facility Operator Certification. The Contractor shall require the operator in charge of the Water Treatment Facility to hold a valid "C-Well" certificate or higher issued by the NC Water Treatment Facility Operators Board.

1.2.2.4.4. Boiler and Heating Equipment Operator License. The Contractor shall provide qualified personnel who possess a valid NC State License for HVAC type work. License should be maintained a minimum a “heating, group number two (2)” type as specified by the NC State Board of Examinee’s of Plumbing, Heating, and Fire Sprinkler Contractors.

1.2.2.4.5. Electrical License. The Contractor shall employ at least one (1) person with a North Carolina Unlimited Electrical License, issued by the NC Board of Examiners of Electrical Contractors. All electrical work performed on MOTSU shall be accomplished by this individual. All electrical work on MOTSU shall be performed IAW the latest edition of the memo titled “Electrical Requirements for Facilities on Military Ocean Terminal, Sunny Point (MOTSU), NC.

1.2.2.4.6. Plumbing License. The Contractor shall employ at least one (1) master plumber who possesses a Class I valid North Carolina State Plumbing License, issued by the NC Board of Examiners of Electrical Contractors. All electrical work performed on MOTSU shall be accomplished by this individual.

1.2.2.4.7. Heavy Equipment Operator License. The Contractor shall maintain records of license of heavy equipment operators (from state of residency) in order to verify and document operators' skill in using heavy equipment.

1.2.2.4.8. HVAC Systems Operator License. The Contractor personnel performing operations, preventive maintenance or repair to HVAC systems shall posses a valid NC State License for HVAC type work. License should be a minimum of a "heating, group number two (2)" type as specified by the NC State Board of Examiners of Plumbing, Heating, and Fire Sprinkler Contractors.

1.2.2.4.9. Vehicle Operator License. Contractor personnel shall have a current, valid driver's licenses from their state of residency.

1.2.2.4.10. Fire Alarm Certification. Contractor personnel performing fire alarm testing, maintenance and repair shall have, as a minimum, a current Fire Alarm Level II certificate from NICET in the sub-field of Fire Protection Engineering Technology (Fire Alarm System) and must have a minimum of five years experience in the inspection, service and repair of fire alarm systems. The contractor personnel shall be physically located so as to be able to provide emergency service on-site within four (4) hours after notification.

1.2.2.4.11. Water Distribution Operator. The Contractor shall provide a valid NC Class C water distribution operator license within seven (7) days prior to the beginning of the contract .

1.2.2.5. Security Requirements. The Contractor shall within seven (7) working days prior to beginning performance of work, provide the CO, a list of all employees who will perform under the contract. The list shall include the full name, social security number, home address, telephone number, work assignment, work section of each Contractor employee, and confirmation of completion of the required training as stated in 1.2.2.8. The Contractor shall notify the CO, in writing, of any addition, deletion, or change in work assignment within three (3) workdays of such change. MOTSU REG 715-5 requires background checks on all individuals performing incidental services.

1.2.2.6. Contractor's employees shall not loiter in or around place of duty during off-duty hours.

1.2.2.7. All Contractor employees performing work under the contract shall be physically able to do their assigned work. The Contractor shall not allow any employee(s) to perform any work who is under the influence of alcohol or is incapacitated by restricted substances.

1.2.2.8. Employee Training.

1.2.2.8.1. OSHA, Hazard Communications Training. The Contractor's employees shall be trained and competent to protect themselves, other employees, property, and equipment used on the installation from the effects of hazardous materials. All expenses incurred by this training will be borne by the Contractor. Such training will be reported as required by the above paragraph and cover as a minimum, the following topics:

1.2.2.8.1.1. Recognition of health and safety hazards.

1.2.2.8.1.2. Methods to minimize risk from health and safety hazards.

1.2.2.8.1.3. Safe use of drum handling equipment, safety equipment and spill control equipment.

1.2.2.8.1.4. Safe operating procedures to be used at an incident scene.

1.2.2.8.1.5. Techniques of coordinating with fellow employees to minimize risks.

1.2.2.8.1.6. Recognition of hazardous material exposure symptoms or injuries.

1.2.2.8.1.7. Forklift operations.

1.2.2.8.1.8. MOTSU Environmental Program Training Course (2 hours/year).

1.2.2.8.1.9. No utility equipment operation or service work shall be performed by personnel with an experience level less than journeyman. Personnel with less experience may serve as helpers. The Contractor shall assure that journeyman; foreman or master craftsman performs or supervises all required work. Experience levels of Contractor personnel are subject to the CO's approval. Craftsman/tradesman providing services within the Ammunition Restricted Area at MOTSU must be qualified in the tasks to be performed and the associated safety precautions to be taken. The Contractor must understand the hazards, standards, procedures, and precautions that apply to the work within this area. In addition, adequate fire fighting training commensurate to the task being performed is required. This training will include the application and meaning of each type of hazard symbol, process for reporting fires, sounding alarms and area evacuations procedures. Training will take a minimum of 30 minutes and is available from the installation QASAS. If the installation QASAS does not give the training, a training plan used must be provide to the QASAS for review and approval.

1.2.2.9 Cooperation with Other Contractors and Government Personnel. The Contractor shall cooperate with other contractors and Government personnel performing work at MOTSU. The Contractor shall be willing to adjust scheduling and performance to accommodate additional support if required by modification. The Contractor shall avoid interfering with the performance of work by other Contractor or Government employees while not compromising health, safety, or security. Any disagreement or cause of delay shall be brought to the attention of the COR.

NOTE. Training of personnel to meet the requirements listed in this section shall be at Contractor expense.

1.3. Quality Control.

1.3.1. In compliance with the contract clause entitled Inspection of Services. FAR 52.246-4, the Contractor shall provide a Quality Control Plan that contains, as a minimum, the items listed in 1.3.2 to the CO for acceptance not later than 30 days after contract award date. The CO will notify the Contractor of acceptance or required modifications to the plan before the contract start date. The Contractor shall make appropriate modifications and obtain acceptance of the plan by the CO before the contract start date.

1.3.1.1. The plan shall include:

1.3.1.1.1. An inspection system covering all the services listed on the Performance Requirements Summary (PRS). It must specify the areas to be inspected on either a scheduled or unscheduled basis, and the individual(s) who will perform the inspection.

1.3.1.1.2. The method(s) for identifying and preventing defects in the quality of service performed before the level of performance becomes unacceptable.

1.3.1.1.3. On site records of all inspections conducted by the Contractor and necessary corrective action taken. This documentation shall be made available to the Government during the term of the contract.

1.3.1.1.4. Corrective Actions. At any time it is determined by the Contracting Officer that the quality control system, personnel, instructions, controls, tests, or records are not providing results which conform to contract requirements, action shall be taken by the Contractor to correct the deficiency, i.e., replacement of personnel, additional quality control inspection, etc.

1.3.2. Contractor Quality Control (CQC) is the means by which the Contractor ensures that all work complies with the contract requirements. The requirements for the CQC organization are a CQC System Manager and sufficient numbers of additional qualified personnel to ensure contract compliance. CQC personnel shall be certified and licensed in the area they are doing inspections to at least the level of the personnel actually doing the work. For example, a CQC person doing electrical inspections shall have an unlimited NC electrical license; a CQC person doing plumbing inspections shall have a master plumber, Class I, NC plumbing license. A CQC Manager, qualified in the type of work being done, shall be on site at all times when work is being performed. The CQC System Manager shall be responsible for the overall management of the CQC and shall have the authority to act for the Contractor in all CQC matters. The CQC System Manager shall have a minimum of 10 years experience in related work. All CQC staff members shall be subject to acceptance by the Contracting Officer. The Contracting Officer may require changes in the CQC Plan and/or organization as necessary to ensure contract compliance. Any such changes shall be at no additional cost to the Government. The CQC Plan shall include:

1.3.2.1. A description of the inspection system to cover all services listed on the performance requirements summary (PRS). Description shall include specifics as to the areas to be inspected on a scheduled and unscheduled basis, frequency of inspections, and the title and organizational placement of the inspectors. Additionally, procedures for meeting mission requirements in the event of a national emergency or natural disaster: and control procedures for any Government provided keys or lock combinations shall be included.

1.3.2.2. A description of the methods to be used for identifying and preventing defects in the quality of service performed.

1.3.2.3. A description of the records to be kept documenting inspections and corrective or preventive actions taken.

1.4. Quality Assurance. According to the Inspection or Services clause. FAR: 52.246-4, the Government will evaluate the Contractors performance under this contract. For those tasks listed on the PRS (Technical Exhibit 1), the Contracting Officers Representative (COR) will follow the methods of surveillance specified in this contract. Government personnel will record all surveillance observations. When an observation indicates defective performance, the CO will require the contract manager or representative at the site to initial the observation. The initialing of the observation does not necessarily constitute concurrence with the observation, only acknowledgment that he or she has been made aware of the defective performance. Government surveillance of tasks not listed in the PRS or by methods other than those listed in the PRS (such as provided for by the Inspection of Services clause) may occur during the performance period of this contract. Such surveillance will be done according to standard inspection procedures or other contract provisions. Any action taken by the CO as a result of surveillance will be according to the terms of this contract.

1.4.1. Performance Evaluation Meetings. The CO may require the contract manager to meet with the CO, contract administrator, Contracting Officer's Representative (COR), and other Government personnel as deemed necessary. The Contractor may request a meeting with the CO when he or she believes such a meeting is necessary. Written minutes of any such meetings shall be recorded by the Contractor, approved by the CO and signed by the Contract Manager and the CO or Contract Administrator. Copies of any such meeting minutes shall be maintained by the CO. If the Contractor does not concur with any portion of the minutes, such non-concurrence shall be provided in writing to the CO within one (1) calendar day following receipt of the approved minutes.

1.4.1.1. All work performed and equipment used under the contract will be subject to inspection at all times by the Government. The Government's inspection program is not a substitute for Quality Control (QC) by the Contractor.

1.5. Environmental and Safety Program.

1.5.1. Compliance With Environmental and Occupational Safety and Health Laws.

1.5.1.1. The Contractor shall perform in compliance with Federal, State, and local laws, rules, and regulations pertaining to environmental protection, occupational health and safety, and transportation, storage, and disposal of hazardous material and hazardous waste. This shall include all responsibilities of an "owner or operator" of that portion of the facility or Government property, which the Contractor uses or services in performing the contract: and

sole responsibility for compliance with all Army and Installation regulations pertaining to hauling and disposal of materials. These subparagraphs are meant to supplement, not replace, any contained elsewhere in the contract.

1.5.1.2. The Contractor shall be responsible for compliance with all such laws, rules, and regulations to include all training of personnel, submission of permit and license applications, purchase of materials, payment of applicable fees and taxes, and payment of fines and penalties for noncompliance. All fines and penalties shall be borne solely by the Contractor.

1.5.1.3. All environmental protection matters shall be coordinated through the Contracting Officer with the Environmental Office or the Division of Public Works at MOTSU. (The MOTSU Environmental Protection Coordinator is located at Division of Public Works, Bldg. 4 Ext. 8603).

1.5.1.4. Inspections by Environmental Personnel. All Government installation facilities operated and maintained by the Contractor may be inspected by the Environmental Office or other Federal, State, or local officials without advance notice. Access for inspection shall be granted upon notice from the Contracting Officer or his designated representative. Any deficiencies noted during inspections must be corrected within two (2) working days.

1.5.1.5. Delays caused by the Contractor's need to comply with such laws or resulting from failure to comply with such laws shall not excuse failure to complete work in accordance with the requirements of the contract.

1.5.1.6. The Contractor shall notify the Contracting Officer and his designated representative within two (2) hours of being contacted by letter, telephone, or facsimile by any Federal, State, or local agency charged with responsibility for compliance with such laws or with responsibility for issuing permits required by such laws. The Contractor shall submit to the Contracting Officer a copy of all correspondence facsimile messages, Notice of Violation, and memorandum of conversation received by the Contractor or sent to such agencies promptly upon receipt or sending. Such information shall be furnished within two (2) hours to the Contracting Officer or his designated representative.

1.5.1.7. The Contractor shall notify the Contracting Officer within thirty- (30) minutes upon discovery of any asbestos or any hazardous substances or waste being released to the air, land or water of the installation, regardless of what party is responsible for the release. In the event that such release is the result of any action of the Contractor, the Contractor shall cease work immediately and notify the Contracting Officer within one (1) hour. The Contractor shall receive no equitable adjustment for the time lost or expenses incurred as a result of the need to correct any such release, which is the result of negligent or acts of Contractor personnel (either accidental or intentional).

1.5.1.8. The Contracting Officer or a designated Contracting Officer's Representative will be allowed access to Contractor personnel and files as they see fit to ensure compliance with this requirement. A copy of this requirement, without changes, shall be inserted in any subcontracts. Performance by the sub-contractor, to include compliance with this requirement, shall be the responsibility of the Contractor.

1.5.1.9. In the event the Government property or equipment is damaged by causes of disastrous nature, such as tornado, hurricane, flood, fire or oil spills and the Contracting Officer determines emergency action is necessary to protect Government property and equipment, the Contractor may be directed to do work to the extent necessary to protect Government property and equipment. If an oil spill occurs, the Contractor shall comply with the provisions of the MOTSU Spill Prevention Control and Countermeasure (SPCCP) plan and the Installation Spill Contingency Plan (ISCP) plan located in the Technical Library at the DPW in Building 4. When disaster response work is directed and performed the contract price shall be adjusted pursuant to the contract clause entitled "Changes" of the contract. The Contractor shall receive no equitable adjustment for the time loss or expenses incurred as a result of the need to respond to any such incident, which is the result of negligence or acts of Contractor personnel (either accidental or intentional).

1.5.1.10. Spills Release of hazardous material into the environment form equipment operated by the Contractor (both GFE and Contractor furnished), storage of Contractor owned materials (during work generated by this contract) is the responsibility of the Contractor. Immediately after a release, the Contractor will provide verbal notifications to the CO and DPW Environmental Office. Notification will be followed by a written communications within twenty-four (24) hours. Cost associated with clean up and response will be the Contractor’s responsibility.

1.5.1.11. Housekeeping. All work areas operated by the Contractor, specifically the Government Furnished Facilities identified in TE-5 shall be inspected daily for adequate housekeeping and findings recorded on daily QC inspection reports. All work areas and means of access shall be maintained safe and orderly.

1.6. Ammunition Security and Safety Program

1.6.1. Compliance with Ammunition and Explosive Security and Safety Regulations. The Contractor shall perform in compliance with all Federal, State, and local laws, rules, and regulations pertaining to ammunition and explosive security and safety. In addition to all ammunition specific requirements all OSHA laws, rules and requirements will be complied with and strongly enforced. Safety compliance on any portion of the facility or Government property, which the Contractor uses or services in performing the contract, is the responsibility of the Contractor. The sole accountability for compliance with all Army and Installation regulations pertaining to safety within ammunition and explosive areas (Restricted Areas beyond Post # 2) is the responsibility of the Contractor.

1.6.2. Ammunition/Explosive Safety Questions. Should questions arise pertaining to any ammunition/ explosives safety/technical standard to include DOD and DA regulations the senior Quality Assurance Specialist (Ammunition Surveillance) (QASAS) for 597th Transportation Terminal Group will provide answers, solutions and/or interpretations. Due to the extreme hazardous nature of the material handled in the ammunition area any answer or interpretation provided by the QASAS is finial with mandatory implementation.

1.7. Force Protection And Physical Security.

1 7.1. The Contractor shall comply with all Federal, State, and local laws, rules and regulations pertaining to Force Protection and/or Physical Security. Contractor personnel working in force protection and/or physical security restricted areas such as computer rooms, command communication center, etc., may be required to sign in and out and state the nature of business at the entrance desk. Work in these restricted areas after normal duty hours shall be coordinated with the respective restricted area Security Officer through the Contracting Officer.

1.7.1.2. Government personnel will be working in office areas during working hours. The Contractor's operations shall not unduly interfere with Government work in the area where any service or maintenance work is being performed. In event such Government office personnel so requests, the Contractor shall temporarily cease work in these areas and report the instructions to include names and telephone numbers of the Government personnel involved, to the Contracting Officer (CO) immediately. The CO will then direct the Contractor as to how the Contractor shall proceed with contract operations. Only the Contracting Officer can authorize a work stoppage. Failure by Contractor to notify the Contracting Officer and receive necessary instructions could result in an unauthorized work stoppage. The Contractor and sub-contractors shall be responsible for ensuring that all employees are aware that they should report such requests to the on-site foreman or Contracting Officer.

1.7.1.3. The Contractor shall be responsible for safeguarding all Government property provided for Contractor use. At the end of each work period, all Government facilities, equipment and materials shall be secured.

1.7.2. Key Control. The Contractor shall establish and implement methods of making sure all keys issued to the Contractor by the Government are not lost or misplaced and are not used by unauthorized persons. The Contractor shall not duplicate any keys issued by the Government.

1.7.2.1. The Contractor shall immediately report to the CO any occurrences of lost or duplicated keys. Report lost or duplicated keys not later than the next workday.

1.7.2.2. In the event keys, other than master keys, are lost or duplicated, the Contractor may be required upon written direction of the CO, to re-key or replace the affected lock or locks without cost to the Government. The Government may, however, at its option, replace the affected lock or locks or perform re-keying and deduct the cost of such from the monthly payment due the Contractor. In the event a master key is lost or duplicated all locks and keys, for that system, shall be replaced by the Government and the total cost deducted from the monthly payment due the Contractor.

1.7.2.3. The Contractor shall prohibit the use of keys issued by the Government by any persons other than the Contractors employees and the opening of locked areas by Contractor employees to permit entrance of persons other than Contractor employees engaged in performance of contract work requirements in those areas.

1.7.3. Lock Combinations. The Contractor shall control access to all Government provided lock combinations to preclude unauthorized entry.

1.7.4. Neither the Contractor nor any of its employees shall disclose or cause to be disseminated any information concerning the operations of the installation which could result in or increase the likelihood of the possibility of a breach of the installation's security or interrupt the continuity of its operations.

1.7.4.1. Disclosure of information relating to the services hereunder to any person not entitled to receive it, or failure to safeguard any classified information that may come to the Contractor or any person under his/her control in connection with work under this contract, may subject the Contractor, his/her agents or employees to criminal liability under 18 USC Sections 793 and 798.

1.7.5. Passes and Badges. All Contractor vehicles shall be registered and receive vehicle passes through the MOTSU Visitor Center.

1.8. Hours of Operation.

1.8.1. Normal Hours of Operation. The Contractor shall perform the services required under this contract during the following hours: 730 a.m. to 4:00 p.m. Monday through Friday, excluding Federal holidays and for those items indicated elsewhere in the PWS to be performed after normal duty hours.
1.8.1.1. Outside Regular Business Hours. The Contractor shall provide a non-duty hour (4:01 p.m. through 7:29 a.m. Monday through Friday, plus all day Saturday, Sunday and holidays) telephone contact number, which shall be the service number where the Contractor can be notified of emergency work. The Contractor shall have qualified personnel available seven (7) days per week to respond to the requests by the CO for emergency and pest management services.

1.8.1.2. Holidays. Except as otherwise specified, routine work shall not be scheduled on holidays or holidays observed in lieu thereof. When a service is required less than three (3) times per week and the schedule for that work falls on a holiday, the work shall be accomplished on the day following or preceding the holiday. Federal holidays are as follows:

New Year's Day - 1st day of January,
Martin Luther King's Birthday - 3rd Monday of January,
Washington's Birthday - 3rd Monday of February,
Memorial Day - last Monday of May,
Independence Day - 4th day of July,
Labor Day - 1st Monday of September,
Columbus Day - 2nd Monday of October,
Veterans Day - 11th day of November,
Thanksgiving - 4th Thursday of November,
Christmas Day - 25th day of December.

1.8.2. Emergency or Special Event Services. Unless otherwise specified emergency repairs shall be accomplished immediately and work shall continued until an emergency no longer exists. The CO shall be notified by telephone (followed in writing by 10:00 a.m. the next workday) of all emergency work, which extends beyond normal working hours. All emergency work necessary to stabilize and restore essential services is considered to be within the requirements of the contract.

1.8.3. Mobilization and Contingency Operations. The Contractor shall support the requirements of mobilization and other contingency operations and respond with required resources to meet the time frames of expanded requirements.

1.9. Conservation of Utilities. The Contractor shall make sure employees practice utilities conservation. The Contractor shall be responsible for operating under conditions that prevent the waste of utilities to include:

1.9.1. Lights shall be used only in areas where work is actually being performed.

1.9.2. Employees shall not adjust mechanical equipment controls for heating, ventilation, and air conditioning.

1.9.3. Water faucets or valves shall be turned off when not in use.

1.9.4. Contractor's employees shall not use Government telephones at the work site for personal reasons or make any toll or long distance calls. The Contractor's employees shall not use any Government computers at the work site for any purpose. Violators may be restricted from employment at MOTSU.

1.9.5. Mechanical equipment controls for heating, ventilation and air conditioning systems shall not be adjusted by the employees.

1.10. Safety Requirements.

1.10.1. In order to provide safety control for protection to the life and health of employees and other persons; for prevention of damage to property, materials, supplies, and equipment; and for avoidance of work interruptions in the performance of this contract, the Contractor shall comply with OSHA and all pertinent provisions of the publication 29 CFR 1910, and EM 385-1-1, Safety and Health Requirement Manual.

1.10.2. The Contractor shall report to the Contracting Officer, in the manner and on the forms prescribed by the Government, exposure data and all accidents resulting in death, trauma, or occupational disease. The Contractor shall immediately report all accidents to the Contracting Officer and COR. Contract employees shall make attempt to be certified in First Aid and CPR training.

1.10.3. Reporting of Fire and Safety Hazards. The Contractor shall train his personnel to recognize fire and safety hazards and encourage personnel in the performance of their duties to report fire and safety hazards and unsafe conditions to their supervisor. The Contractor shall take corrective action to remedy reported deficiencies in accordance with the terms of this contract. The COR shall be notified of deficiencies beyond the terms of this contract.

1.10.4. All equipment used under this contract shall be made available by the Contractor for inspection by the CO at least seven workdays prior to the contract startup date. Contractor shall perform inspection on all equipment prior to the contract start up date and once a year thereafter. A condition report for each equipment shall be maintained by the contractor and a copy supplied to the COR. If the equipment is at any time deemed unsafe or unserviceable by the CO, the Contractor shall remove equipment immediately and have it repaired to a safe and operable condition. The Government does not assume and hereby specifically disavows any duty to inspect the equipment in order to assure safe operation. The Contractor or subcontractor(s) at any tier are at all times responsible for assuring equipment is in a safe and serviceable condition and shall perform all tasks in a safe, responsible manner.

1.10.4.1. At the time of the inspection, the equipment's ability to perform at the designed use shall be demonstrated by the contractor. If the equipment or personnel fail to meet the standards at the initial inspection, the Contractor shall replace the equipment or personnel at the direction of the Contracting Officer, no later than 72 hours before beginning performance on the contract. The rejection of personnel and/or equipment does not relieve the Contractor of the responsibility of performing services in accordance with the contract.

1.10.5. Personnel and Property Safety.

1.10.5.1. The Contractor shall perform work requirements in a manner, which protects occupants and property within the work area from any harm or injury. Work shall be scheduled to afford this protection. In addition, contractor shall wear personnel protection equipment that is suitable for there work (i.e. steel toe shoes, safety vests,

float coats, eye protection, gloves, hard hats, etc…). The personal protection equipment should be of new condition and be replaced as needed per manufacturers recommendation.

1.10.5.2. The Contractor shall immediately correct all safety deficiencies upon discovery of or notification by contractor personnel, the Contracting Officer or COR, or a third party, and shall notify the Contracting Officer or COR of the corrective action to be taken. Notice of a safety deficiency, when identified to the Contractor or his representative at the site of work, shall be deemed sufficient to initiate corrective action.

1.11. Lost and Found. **All articles found by Contractor personnel to which a reasonably prudent person would assign monetary, personal, or other value (including possible contraband items) shall be turned in to the Provost Marshal's Office (Building 32) the same day found and shall obtain receipts for articles turned in.**

1.12. Contractor Damages. **The Contractor shall report to the CO of any damages to Government property prior to work in the specific area. The CO or COR shall formally acknowledge the property damage prior to the contractor commencing. The Contractor shall be responsible for all damages to any element of Government property occurring as a result of his/her employees work (over and above expected operational damage, considered such by the CO) and shall make all necessary repairs at no cost to the Government and to the satisfaction of the Government.**

1.13. Parking/Transportation. **The Contractor's personnel shall not drive privately owned vehicles to the work site without the approval of the CO. The Contractor shall provide transportation to and from the work site.**

1.14. Records. The Contractor shall be responsible for creating, maintaining, and disposing of only those Government required records that are specifically cited in this PWS or required by the provisions of mandatory directives. See Section 6. Applicable Publications and Forms. If requested by the Government, the Contractor shall provide the original record, or a reproducible copy of any such record within five (5) working days of receipt of the request. The Contractor and any sub-contractor to this solicitation and the resulting contract shall allow the Contracting Officer and the Contracting Officers Representative to inspect and photocopy any and all records, which the Contracting Officer deems necessary.

1.15. Management and Staffing.

1.15.1. Service and Maintenance Management. The Contractor shall provide all services and maintenance management required to perform the work IAW the performance work statement as specified.

1.16. Advise and Notify.

1.16.1. The contractor shall report any circumstances of needed repair of the facilities or unusual soiling of an area, which may affect performance of contract work, unhealthy or hazardous conditions or any delays or interference of work by employees of the Government. In any event the report shall be made not later than the Close of Business (COB) on same day.

1.16.2. Report to the Contracting Officer all personal articles found by the Contractor or his employees. Found articles shall be turned in to the Provost Marshall's Office (Building 32) by the Contractor on same day found.

1.16.3. Report other circumstances, which would affect the Contractor's performance of work required under the contract.

1.16.4. Provide facilities maintenance and repair information, available only through the Contractor, which must be reported to higher levels of command as specified by the Contracting Officer. The Contractor shall develop and maintain a data system, which will provide accurate and complete data for the reports. The reporting system developed by the Contractor shall be subject to approval by the Contracting Officer.

NOTE: FAILURE TO DEVELOP, MAINTAIN, IMPLEMENT, AND PROVIDE (IN A TIMELY MANNER) ALL THE REQUIRED PLANS, SCHEDULES, REPORTS, AND LOGS AS CALLED FOR IN THE CONTRACT MAY BE CAUSE FOR TERMINATION AND/OR PAYMENT REDUCTIONS. WHERE

PLANS AND SCHEDULES ARE SUBJECT TO THE GOVERNMENT'S APPROVAL. THE CONTRACTOR SHALL INCORPORATE ALL GOVERNMENT RECOMMENDATIONS. DISAGREEMENTS OVER CONTENTS MAY BE HANDLED UNDER THE DISPUTES CLAUSE.

1.17. Transition.

1.17.1. The contractor shall ensure the continuity of service while implementing its transition plan for all affected activities to preclude any adverse impact on the mission. The Contractor shall implement the actions necessary for a smooth transition of operations. During this period, which shall not exceed fourteen (14) calendar days, the Contractor shall make all preparations and conduct as many on site reviews as he deems necessary to commence full performance of work under the contract. The incumbent contractor and the successful contractor shall provide a sufficient number of personnel to ensure effective transfer of all work in progress so as not to impact mission accomplishment.

1.17.2. The Government will provide office facilities for the project manager's operation and immediate staff. Office supplies (i.e. pencils, pens, paper) shall be furnished by the Contractor. The use of office facilities provided during the transition phase is limited to the implementation of the transition phase and in no instance shall the Contractor use the Government office facilities or any property provided to conduct the contractor's personal business such as recruitment or hiring of personnel. The office property shall include Class "C" telephone service. The provision of said facilities and property is temporary, that is, limited to the transition phase.

1.17.3. Facilities, equipment and tools furnished by the Government shall be limited to terms and conditions of the contract and as stated in Section 3.

1.17.4. Government rented/leased office equipment (i.e. copiers) will not be available to Contractor for use during this period or the life of the contract.

1.17.5. Joint Government-Contractor inspection of Government-furnished property, to include keys shall be accomplished during the transition phase with completion at least one (1) day prior to start of the contract. A joint inventory and condition report will be accomplished during the transition.

1.17.6. During the transition phase, all actions necessary to transfer property to Contractor shall be completed at least one (1) day prior to the start of the contract.

1.17.7. During the transition phase the Contractor will be issued keys for those areas in which access is required such as entrance to offices and shop facilities.

2. DEFINITIONS, ABBREVIATIONS AND ACRONYMS.

2.1. Standard Definitions.

2.1.1. Accidental Damage: An unforeseen and unplanned event or circumstance, an unexpected happening causing loss or injury which is not due to negligence or misconduct on the part of an employee or the Contractor. (NOTE. Determination of accident/damage is the responsibility of the Contracting Officer, responsibility for the repair is the Contractor's even if financial liability is later determined to be the responsibility of other than the Contractor.)

2.1.2. Administrative Contracting Officer (ACO): The only person who has authority to enter into and administer contracts/modifications and make determinations and findings with respect thereto or with any part of such authority.

2.1.3. Alteration: The work required to adjust interior arrangement, on-post location, or other physical characteristics of an existing real property facility so that it may be more effectively adapted to or utilized for its designated purpose. Additions expansions-extensions are not included in alterations.

2.1.4. Ammunition and Explosive Area: An area specifically designated and set aside from other portions of an installation for the development, manufacture, testing, maintenance, storage, or handling of ammunition and explosives.

2.1.5. Appurtenances (Surfaced Areas): Appurtenances include all features associated with pavement, such as ditches, culverts, and storm sewers; traffic signs, signals, markings; rights-of-way or snow fencing; shoulders; curbs; guard rails; cattle guards; and support embankments.

2.1.6. As Is: Means without additional maintenance or repair expense, solely for the purpose of transfer to the Contractor.

2.1.7. Associated Structures (Surfaced Areas): Associated structures are all major items included in a road net or other system which are considered to be of greater engineering significance than an appurtenance.

2.1.8. Bi-: A prefix used to denote an occurrence at intervals of two (2) (i.e., bimonthly).

2.1.9. Breakdown: The stoppage or collapse of equipment of a facility, or a component there-of, that requires immediate corrective action to restore it to an operating condition.

2.1.10. Bulky Items: The following examples are provided, but are not all inclusive: lumber pipe or debris, exceeding three (3) feet in length, two (2) feet by two (2) feet square or two (2) feet in diameter, concrete blocks, ice boxes, refrigerators, deep freezer, ranges, bed springs, sofas, water heaters, water tanks, sinks, and tree stumps.

2.1.11. Call Back: A request for additional service following the initial service that has not provided the control required. Repeated callbacks are possible and will be provided at no additional cost to the government.

2.1.12. Check: To examine test or compare with a standard to verify that the unit under surveillance is operating within design specifications.

2.1.13. Clean: As used generally means removal of dirt, debris and impurities. As used for acceptance of work, free from dirt, debris or contamination of impurities: unsoiled, unstained, recently laundered, fresh and unused, neat and tidy, having no flaws or roughness, etc.

2.1.14. Composite Labor Rate: The average combined-skill rate per hour to include all costs associated with labor, hand and small tools, overhead, supervision, administration, material handling, transportation, travel time, G&A, and profit.

2.1.15. Contract Discrepancy Report (CDR): A formal, written documentation of Contractor nonperformance or substandard performance for contracted work.

2.1.16. Contracting Officer (CO): The only person who has authority to enter into and administer contracts/modifications and make determinations and findings with respect thereto or with any part of such authority.

2.1.17. Contracting Officer's Representative (COR): A person designated in writing by the Contracting Officer to conduct specific and limited technical administrative actions under the contract. May inspect services and certify invoices.

2.1.18. Contractor: The term Contractor as used herein refers to both the prime Contractor and tier subcontractors. Any tier subcontractor shall comply with the provisions of the contract. The prime Contractor is solely responsible for all subcontractors in performance of the contract.

2.1.19. Contract Manager: A Contractor employee physically on site with full authority to contractually commit the Contractor on all matters pertaining to contract performance and administration.

2.1.20. Construction: The erection, installation, or assembly of a new facility: the addition, expansion, extension, alteration, conversion, or replacement of an existing facility: or the relocation of a facility from one installation to another, includes equipment installed and made a part of such facilities, and related site preparation, excavation, filling, and landscaping, or other land improvements.

2.1.21. Cost Analysis Codes (CAC): These are five (5) digit numeric codes used to track costs to groups (types) of facilities. All work documents must have a CAC Code indicated on the document.

2.1.22. Crack and Crevice Treatment: Treatment using a pesticide applied as a pin-stream or with a crack and crevice injector directly in to cracks and crevices of building joints, corners and wall voids, between equipment legs, and similar pest harborages.

2.1.23. Critical Equipment and Facilities: Items of equipment or facilities that must operate continuously or throughout the respective season in order to support critical missions. Failure of equipment or facilities in meeting resign output requirements may affect the health and welfare of personnel or damage Government equipment or properties. Emergency or urgent service calls are often required to restore the critical equipment to optimum operating condition and to provide the output required. Examples are: Computer Facilities: 24-hour operations, such as Electrical Plants/Systems, Water Plants/Systems, etc. Fire Prevention and Protection Facilities, and Hospitals.

2.1.24. Cyclic Service: Those activities, which are accomplished on a scheduled or recurring basis.

2.1.25. Deduction: A deduction is money that will be subtracted from the Contractors invoice for non-compliance to contractual or quality requirements in accordance with the Performance Requirements Summary and FAR 52.246-4 and 52.246-12.

2.1.26. Defect: A defect is the lack of something necessary for compliance with contract requirements. A defect may be caused by either nonperformance or poor performance.

2.1.27. Deliverable: Reports, plans and other Contractor submissions that shall be delivered to the Government at a contract specified date or time interval.

2.1.28. Division of Public Works (DPW): The senior person (officer or civilian) responsible for the technical installation, maintenance and functioning of Terminal facilities. The DPW plans, directs, oversees and coordinates all Division of Public Works activities (Located in Bldg. 4).

2.1.29. Estimate: A calculated approximation of the worth, size and/or cost of a specified requirement.

2.1.30. Emergency Work/Calls: Work which takes priority over all other requests and requires immediate action, including diverting employees form other jobs, if necessary, to cover the emergency. Usually, the work is necessary for the protection of health, safety, security of sensitive Government property, or to prevent damage to property.

2.1.31. Equipment-In-Place: Equipment-in place is movable equipment that may be removed without destroying or reducing the usefulness of the facility.

2.1.32. Expendable/Non-expendables:

2.1.32.1. Expendables: Government property or items that are consumed in use or loses their identity in use and are dropped from stock record accounts when issued or used. Expendable items include certain repair parts of low intrinsic value or items unworthy of full accounting procedures, e.g., paint, fuel, cleaning and preserving materials, or items which lose their identity (such as spare parts, which are sometimes referred to as "consumable supplies and material").

2.1.32.2. Non-expendables: Government property or supplies which are not consumed in use and which retain their original identity during the period of use, such as machines and tools and for which he must maintain accountability for the useful life of the items.

2.1.33. Equipment Book Log: A mandatory record of the events occurring during the life cycles of equipment made in accordance with Army Regulation 420-83, and Department of Army Pamphlet 738-750 and The Army Maintenance Management System (TAMMS).

2.1.34. Facilities: All items of real property other than land.

2.1.35. Facility Replacement: The replacement of an entire facility when replacement is more economical than major repair. This includes installed equipment.

2.1.36. Family Housing (AFH) Account: Includes cost of family housing units and all services provided in the operation of family housing facilities to include utilities, entomology, and maintenance of Real Property Facilities.

2.1.37. Federal Holidays: Federal Holidays are: New Year's Day, Martin Luther King Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, and Christmas Day.

2.1.38. Girdling: Also known as ringing, removing or cutting of the cambium layer of plant material.

2.1.39. Government: An authorized representative of the United States the Department of Defense, or the Department of the Army.

2.1.40. Government-Furnished Equipment (GFE): Government equipment provided to the Contractor for use in fulfilling the terms of the contract only maintained by the Contractor (IAW FAR cart 45.509 unless otherwise stated in the contract), and returned to the Government at contract conclusion and/or termination in the same condition received less normal wear.

2.1.41. Government-Furnished Facilities: Buildings (or parts thereof), storage facilities and parking areas designated by the Government for the exclusive use of the Contractor in fulfilling the terms of the contract.

2.1.42. Government-Furnished Material: Equipment replacement parts and other consumables provided to the Contractor for the maintenance and/or repair of the installation's real property.

2.1.43. Government-Furnished Property (GFP): All equipment, facilities and material provided by the Government for the exclusive use of the Contractor in fulfilling the terms of the contract only.

2.1.44. Government Representative. The Contracting Officer (CO), the Administrative Contracting Officer (ACO), Contracting Officers Representative (COR), and Quality Assurance Evaluators (QAE).

2.1.45. Grounds:

2.1.45.1. Improved Grounds: Improved grounds are grounds on which intensive development and maintenance measure are performed. This category normally applies to areas within the built-up section of an installation, which contains lawns, landscaping, parade grounds, athletic facilities, and similar areas.

2.1.45.2. Semi-Improved Grounds: Semi-improved grounds are grounds that require periodic maintenance of a lesser degree than improved grounds. This category includes road sites, picnic areas, and ammunition storage areas.

2.1.45.3. Un-Improved Grounds: Grounds not included in the above categories. This classification includes timber and forestlands, ponds, swamp areas, and other areas requiring limited or no maintenance.

2.1.45.4. Playground: A piece of land used for and usually equipped with facilities such as swing-sets, slides, sandboxes, teeter-totters and jungle gyms for recreation especially by children.

2.1.46. Hand Receipt: A signed document acknowledging acceptance of responsibility for items of property listed on the receipt which are loaned or issued for use and are to be returned. For example, Government Furnished

Equipment that is accepted by the Contractor will be issued to the Contractor for the Contractors use on a Hand Receipt.

2.1.47. Hazardous Waste. Waste materials that are toxic, poisonous, corrosive, irritating, sensitizing, radioactive, biologically infectious, explosive or flammable and that present a significant hazard to human health and the environment. Special handling procedures and disposal facilities are required for their disposal. Hazardous wastes, as defined by the Environmental Protection Agency (EPA) Federal Regulations shall be handled in accordance with EPA, Local State Board of Health and Department of Transportation procedures.

2.1.48. Herbicide. A chemical agent used to destroy or inhibit plant growth.

2.1.49. Improvement: An abbreviated description of alteration and addition-expansion-extension work on dwelling units or communal other real property under the Family Housing Construction Program.

2.1.50. Incidental Improvement: Alteration and/or addition-expansion -extension work performed on dwelling units or other real property accomplished within the cost limitations of the Family Housing O&M Program.

2.1.51. Insecticide: Any substance or mixture of substances intended for use as a plant regulator to destroy or inhibit plant growth.

2.1.52. Insect/Rodent Control: A term combining "prevention" of infestations and "correction" of infestations.

2.1.53. Insect/Rodent Correction: Control measures used to reduce and/or eliminate existing pest infestations.

2.1.54. Insect/Rodent Prevention: Methods and procedures designed to prevent pest infestations.

2.1.55. Inspection: The critical examination of a structure, mechanism, system or procedure to discover discrepancies and/or inefficiencies.

2.1.56. Installed Building Equipment: Items of equipment or furnishings, including materials used for installation, which are required to make the facility usable and are affixed as a permanent part of the structure. These items include plumbing fixtures and equipment: fixed heating, ventilating, cooling, air conditioning, electrical, and fixed fire protection systems: elevators: overhead crane runways, lavatory counters, cabinets, and similar fixed equipment.

2.1.57. Integrated Pest Management (IPM): A systems approach to reduce pest damage to tolerable levels through a variety of techniques, including predators and parasites genetically resistant hosts, natural environmental modifications and when necessary and appropriate chemical pesticides.

2.1.58. Loss of Critical Services: A breakdown, stoppage or loss of electrical, mechanical, or structural systems, facilities and/or equipment such that the operational capability of the installation.

2.1.59. Lot: A collection of service outputs from which a sample is drawn and inspected to determine conformance with the standard.

2.1.60. Lot Size: The number of service outputs in a lot.

2.1.61. Maintenance (General): The work required to preserve and maintain a real property facility (RPF) in such condition that it may be effectively used for its designated functional purpose which goes beyond the scope of preventive maintenance. Maintenance includes work done to prevent damage, which would be more costly to restore than to prevent. Maintenance includes work to sustain components.

2.1.62. Maintenance Corrective (Surfaced Areas): Maintenance of roads pavements and other surfaced areas primarily encompasses day-to-day routine work. It includes such functions as blading or dragging stabilized surfaces: cleaning ditches: patching; sealing existing paved surfaces; sealing joints and cracks: slab jacking; snow removal: snow fence erection and removal; vegetation control near pavements; erosion control: maintenance of bridges, trestles, retaining walls, culverts, inlets, and manholes: and replacing or repainting pavement markings and

traffic control signs and signals. Examples of other applicable work are: (I) application of a dust palliative (i.e., a chemical, dilute asphalt emulsion, or single surface treatment) both to the traffic-way and the road shoulder, provided only minimal surface preparation is needed: (2) application of a sealer coat or surface treatment on existing asphalt or concrete surface; and (3) scarifying a stabilized area, adding new material, reshaping, and compacting.

2.1.63. Medically Important Anthropoida. Disease bearing.

2.1.64. Munitions Area. Those designated areas where munitions and/or explosives are stored.

2.1.65. Modernization. Improvement of a dwelling unit or communal other real property by elimination of substandard conditions caused by obsolescence of otherwise serviceable constituent parts, materials, capacity and layout so that the improved dwelling unit or communal other real property facility will be at the same standard as a new dwelling unit or other real property facility currently being constructed by the Army.

2.1.66. New Work. Replacement of a complete facility or installation of a new facility. Complete resurfacing of a road, street or paved area, construction of a new road, street, or structure. Any addition, expansion or extension, which results in a physical increase or the relocation of a facility from one installation to another. Also included is alteration to adjust interior arrangements or other physical characteristic or conversion required to adjust interior or physical characteristics so that it may be used for new functional purpose.

2.1.67. Non-critical Equipment or Facilities. Those categories of equipment or facilities that do not affect the health of personnel, do not cause damage to Government properties or do not cause critical facilities such as Automated Data Processing to shut down in case of equipment failure.

2.1.68. Nursery Stock. Plant materials such as trees, vines, shrubs, and hedges obtained from a nursery, which are suitable for transplanting.

2.1.69. Open Drainage. Drainage that is not contained within a defined structure (tube, culvert, etc.); e.g. Drainage creek, runoff area, road ditch etc.

2.1.70. Operator Equipment Maintenance. The basic daily services performed by the equipment operator. Includes visual inspection for damage and pilferage, leaks, instrument operation, brakes, transmission (clutch) steering, engine operation, lights, reflectors and other safety devices and appropriate reporting for correction or repair. Fueling, oil and battery checks, tire inflation and changing flat tires as required are operator tasks.

2.1.71. Parking and Open Storage Area. An area planned and designed for storing, servicing, and parking of organizational vehicles: or for parking of vehicles belonging to visitors: civilian employees, and attached personnel: or for receiving, classifying, and storing of supplies, new and salvaged materials, and equipment pending assignment for its use or distribution: or for salvaging, processing, or repairing equipment.

2.1.72. Performance Indicator. An output of a work process that can be measured.

2.1.73. Performance Requirements Summary (PRS). A document that defines the standards and surveillance basis for Government inspectors for work or services performed by the Contractor.

2.1.74. Performance Work Statement (PWS). See "Statement of Work".

2.1.75. Pest Control. A term combining “prevention” of infestations and “correction” of infestations.

2.1.76. Pest Control Management. Pest control or prevention by a comprehensive approach that considers various suppression techniques, the habitat or the pest, and interrelationships between the pest populations and the ecosystem.

2.1.77. Pest Correction. Control measures used to reduce and/or eliminate existing pest infestations.

2.1.78. Pest Prevention. Methods and procedures designed to prevent pest infestations.

2.1.79. Pesticide: Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest: and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

2.1.80. Pesticide Spill. Spillage or leakage of one quart or more of concentrate or diluted pesticide onto or into any floor, rood, culvert, gutter, drain, paved or unpaved surface, land area, commodity, or standing or flowing body of water of any size.

2.1.81. Planned Sampling. A quality assurance technique the Government employs to subjectively form conclusions about the quality of a specific piece of work or service provided by the Contractor.

2.1.82. Plant Equipment. Personal property of a capital nature (including equipment, machine tools, test equipment, furniture, vehicles, and accessory items) for use in manufacturing supplies in performing services or for any administrative or general plant purpose. It does not include special tooling or special test equipment.

2.1.83. Petroleum. Oil. and Lubricants (POL) Area. Grounds adjacent to structures and/or tanks that store or dispense petroleum, oils and lubricants.

2.1.84. Policing Ground. The pickup and disposal of paper, bottles, cans, cardboard, plastic, rags, cigarette butts, and other litter (garbage) on grounds and other areas to include disposing of garbage in cans at the tennis court and play area at Fort Johnston.

2.1.85. Preventive Maintenance (PM). The systematic and cyclic check inspection and correction of minor deficiencies before they occur or before they develop into major defects, as well as reporting of deficiencies beyond the scope of preventive maintenance. PM includes the accomplishment of minor maintenance and adjustments including correction of minor safety defects. Preventive Maintenance (including Operation Maintenance) requirements including inspections and minor maintenance and adjustments associated with PM, shall be documented with recurring IJO's.

2.1.86. Preventive Maintenance Record. A listing of PM services performed annotated on DA Form 4177 or an appropriate substitute form or an electronic record approved by the Contracting Officer.

2.1.87. Priority. Indicates the relative importance of a Service Order and is associated with time limitations expressed in hours and in working days for response and completion of the work.

2.1.88. Property. The terms include all property, both real and personal, and consist of five (5) separate categories: material, special tooling, special test equipment, military property, and facilities.

2.1.89. Professional Pest Management Personnel (PPMP). Military officers or civilian employees of the Department of Defense or its components (a) with a college degree in a biological or agricultural science, such as agronomy, entomology, forestry, or wildlife biology; and (b) in a current (major command) assignment that includes pest management responsibilities exercised on a regular basis. Civilian personnel also must meet the minimum requirements of governing Civil Service Commission qualification standards.

2.1.90. Quarterly. The period October through December; January Through March: April through June; and July through September.

2.1.91. Quality Assurance (QA). Those actions taken by the Government that the services received meet the contract requirements.

2.1.92. Quality Assurance Evaluator (QAE). The Government employee responsible for checking and monitoring Contractor performance.

2.1.93. Quality Assurance Surveillance Plan (QASP). A written plan that details what is to be evaluated, how evaluations are to be accomplished, frequency of evaluations, evaluation parameters, sampling guides, inspection checklists, and other information that the QAE should have in order to provide effective QA.

2.1.94. Quality Control (QC) Program. Contractor's system of controlling the equipment, systems or services to insure that requirements of the contract are met. Contractor is responsible for QC and offering to Government for acceptance only those supplies or services conforming to contract.

2.1.95. Random Sampling. A quality assurance technique of selecting a sample from a lot (or population) in such a way that every possible sample that could be selected has the same probability of being selected. It is a method for looking at a sample of services to determine the quality of the entire lot of services

2.1.96. Recoverable Resources. Materials such as metal scrap, scrap lumber, crating materials, empty barrels, boxes, textiles and bags, waste paper, cartons, kitchen waste, and similar materials which retain useful, physical, chemical, or other property which retains reclaimable, recycling, salvage or salable value.

2.1.97. Recurring Maintenance (RM). Recurring maintenance is scheduled maintenance and services such as plant operations, scheduled grounds maintenance such as mowing, scheduled pest and vegetation control as well as all other work and services defined as Level I in each functional area. All scheduled recurring maintenance is Work Level I without exception. Labor, materials and equipment required is perform recurring maintenance are furnished by the Contractor and is included in the negotiated price for Level I work and services.

2.1.98. Reliability Rate (RR). A measure of equipment performance computed by dividing actual operating hours by required operating hours. Operating hours are acceptable only when the desired output is being maintained.

2.1.99. Repair (General). The corrective action needed to restore an RPF to such condition that it may effectively be used for its designated functional purpose. Repair may be overhaul, reprocessing, or replacement of deteriorated component parts or materials.

2.1.100. Repair (Surfaced Areas). The repair and restoration of transportation system (s) failed or failing section of roads, pavement and other surfaced areas to such a condition that the section may be utilized for its designated purpose. Each undertaking must involve repairs of a finite scope. Typical repair processes include overhaul, reprocessing, or replacement. Normal repair work pertaining to surfaced areas includes such general items as: partial replacement of a single real property facility (one single unit) providing the capacity is to be increased over that allowed for repair work and/or the surface area is not increased: replacement of failed storm and subsurface drainage systems, including drainage channels: replacement of failed curbs and combination curbs and gutters: repair or restoration of a bridge within established limitations, provided that it is in the same location as the initial structure and that the surface area is the same as or less than that of the original structure: replacement of stabilized surfaces, surfaced area appurtenances, guard rails traffic control devices, individual concrete slabs, and materials to prevent slope erosion; placement of a surface treatment on an un-surfaced area or shoulder; and placement of an overlay which has a nominal thickness of three-fourths of an inch or less on an existing surface treatment.

2.1.101. Rodenticides. Specialized forms of pesticides used only against rodents.

2.1.102. Real Property Facility (RPF). A separate building, structure, installed equipment: utility system. or improvement.

2.1.103. Sample. A collection of individual draws from a lot (or population). Ordinary inferences are to be made from the sample to the lot, and the one must be in some way representative of the other.

2.1.104. Service Order (SO). Service orders are documented orders for maintenance or service work performance. SO’s require prior approval.

2.1.105. Standard. The level of performance that must be met in order to be acceptable.

2.1.106. Standing Operations Order (SOO). Work of a fixed nature, which requires devoted personnel effort on a continuing basis.

2.1.107. Structures. Structures are inclusive of docks, piers, wharfs, swimming pools, towers, hutments, historical monuments, grandstands and bleachers, tanks, and underground storage facilities.

2.1.108. Surfaced Areas. The surfaced areas covers all graded, paved, or stabilized (other than grass) areas used for vehicular, truck vehicle or pedestrian traffic (e.g., roads. streets. service drives, walks. parking areas and open storage areas, including base and sub-base courses).

2.1.109. Spot Repair (Surfaced Areas). The repair or replacement of failed or deteriorated separate areas of asphalt or concrete slabs by removing and replacing portions of the pavement surface, base, sub-base, or appurtenances.

2.1.110. Stabilized Areas. Areas, which have been improved from their natural condition by mechanical compacting, with or without the addition of stabilizing agents.

2.1.111. Statement of Work (SOW). A document that accurately describes the essential and technical requirements for items, materials, or services including the standards used to determine whether the requirements have been met. Also referred to as the performance work statement.

2.1.112. Supervision. The personnel management and direct oversight required to insure all contracted work is performed and completed in accordance with the contract requirements, performance and quality standards.

2.1.113. Surveillance. Planned or random observations of the timeliness, accuracy, completeness and/or quality of services performed.

2.1.114. System. A system, as used in the contract, includes all mechanical and electrical equipment; supporting structures; pneumatic, electrical and mechanical types of controls: and all auxiliary equipment required to provide a specific function and output requirement.

2.1.115. Survey. The process of inspecting in or around facilities and grounds before and after treatment to locate and determine the exact type and extent of any pest infestation and adequacy of control.

2.1.116. Technical Bulletin (TB). A publication containing technical information pertaining to vehicles, equipment and professional techniques.

2.1.117. Test. Any operation or series of operations under fixed conditions which compares actual performance to design standards.

2.1.118. Trash. Worn-out, broken-up or worthless things which are not animal or vegetable matter. Trash shall include branches, twigs and tree leaves.

2.1.119. Ultra-low Volume (ULV). Application of 1/2 gallon or less of pesticide per acre outdoors, or 1.5 ounce or less per 1000 cubic feet indoors.

2.1.120. Work Plan. A written schedule of tasks or activities designed to satisfy a defined requirement within a specified time frame and at a predetermined cost.

2.1.121. Work Order Shop Operations. All necessary procedures instituted by the Contractor that will ensure maintenance and repair work specified in work orders is performed and validated by the Contractor personnel within the scope of this PWS, including appropriated record keeping.

2.1.122. ”Z” Account, Real Property Maintenance Activities (RPMA). The RPMA
“Z" Account is a collective term for the functional categories of expenses described in the Army Management Structure (AMS) as; .J0000 (Operation of Utilities; .K0000 (Maintenance of Real Property); .L0000 (Minor Construction); and .M0000 (Other Engineering Support).

2.1.122.1. "J" Account. The Accounting Classification utilized to account for Operation of Utilities Labor. Included in the J Account: Water Service. Sewage Service. Electric Service, Boiler and Heating Plants. Air Conditioning and Cold Storage Plants, and other utilities operations.

2.1.122.2. "K" Account. The Accounting Classification utilized to account for Maintenance and Repair of Real Property Labor. Included in the K Account: Utilities Systems, Buildings, Grounds, Railroad Maintenance, Surface Areas, Miscellaneous Maintenance, and Suspense Accounts.

2.1.122.3. "L" Account. The Accounting Classification utilized to account for Minor Construction Labor. Included in the L Account: Alterations and Construction.

2.1.122.4. "M" Account. The Accounting Classification utilized to account for Other Engineering Support Labor. Included in the M Account: Fire Prevention and Protection: Refuse Handling; Pest Management Services: Custodial Services; Snow & sand removal and ice alleviation, and snow fences: and Miscellaneous Engineer Activities.

2.1.123. Definitions of Frequencies of PM. PM shall be performed at the frequencies identified in the Attachments on PM as defined herein.

2.1.123.1. Monthly. To be acceptable, monthly tasks shall be satisfactorily accomplished 12 times during the contract year. Work shall be in accordance with the accepted schedule, but monthly tasks shall not be scheduled for accomplishment less than 20 calendar days apart nor more than 40 calendar days apart. Failure to perform 12 PM actions during the contract or failure to meet the scheduling criteria will cause deductions to be taken in accordance with Section E.

2.1.123.2. Quarterly. To be acceptable, quarterly tasks shall be satisfactorily accomplished four (4) times during the contract year. Work shall be in accordance with the accepted schedule, but quarterly tasks shall not be scheduled for accomplishment less than 75 calendar days apart nor more than 100 calendar days apart. Failure to perform four (4) quarterly tasks during the contract or failure to meet the scheduling criteria will cause deductions to be taken in accordance with Section E.

2.1.123.3. Semi-Annual. To be acceptable, semi-annual tasks shad be satisfactorily accomplished two (2) times during the contract year. Work shall be in accordance with the accepted schedule, but semi-annual tasks shall not be scheduled for accomplishment less than 170 calendar days apart nor more than 190 calendar days apart. Failure to perform two (2) semi-annual tasks during the contract or failure to meet the scheduling criteria will cause deductions to be taken in accordance with Section E.

2.1.123.4. Annual. To be acceptable, annual tasks shall be satisfactorily accomplished when scheduled and shall be completed prior to contract expiration.

2.1.123.5. Greater than Annual. To be acceptable, greater than annual (including biennial and triennial) tasks shall be satisfactorily accomplishes when scheduled.

2.2. Acronyms and Abbreviations.

AASHTO	American Association of State Highway and Transportation Officials
AC	Air Conditioning
ACI	American Concrete Institute
ACO	Administrative Contracting Officer
ADP	Automated Data Processing
AFARS	Army Federal Acquisition Regulation Supplement
AFH	Army Family Housing
AI	The Asphalt Institute
ALMC	Army Logistics Management Command
AMS	Army Management Structure
ANSI	American National Standards Institution
AQL	Acceptable Quality Level
AR	Army Regulations
AREA	American Railway Engineering Association
AR	Army Regulations
ARI	Air-Conditioning and Refrigeration Institute
ASAE	American Society of Agriculture Engineers
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASSE	American Society of Sanitary Engineers
ASTI	American Standards & Testing Institute
ASTM	American Society for Testing and Materials
AWWA	American Water Works Association
CAC	Cost Analysis Code
CDR	Contract Discrepancy Report
CFP	Contractor Furnished Property
CFR	Code of Federal Regulations
CLIN	Contract Line Item Number
CMMIS	Computerized Maintenance Management Information System
CO	**Contracting Officer**
COCO	Contractor-Owned, Contractor Operated
COD	Chemical Oxygen Demand
COE	Corps of Engineers
CONUS	Continental United States
CPE	Contractor Performance Evaluation
CSB	Contract Services Branch
CPW	Center for Public Works
COR	Contracting Officer's Representative
CQC REP	Contractor Quality Control Representative
DA	Department of the Army
DA PAM	Department of the Army Pamphlet
DBA	Davis-Bacon Act
DBOF	Defense Business Operating Fund
DD	Department of Defense
DPW	Division of Public Works
DEHNR	NC Department of the Environment, Health and Natural Resources
DEIS	Defense Energy Information Systems
DFARS	DOD FAR Supplement
DLA	Defense Logistics Agency
DOD	Department of Defense
DPI	Data Processing Installation
DPW	Division of Public Works
DRMO	Defense Reutilization and Marketing Office

DSN	Defense Switching Network
DX	Direct Exchange
ECIP	Energy Conservation Improvement Program
EEAP	Energy Engineering Analysis Program
EMCS	Energy Monitoring Control System
EO	**Executive Order**
EOM	End of Month
EPA	Environmental Protection Agency
ERMB	Engineer Resources Management Branch
EPS	Engineered Performance Standards
FAO	Finance and Accounting Office(r)
FAR	Federal Acquisition Regulation
FCC	Federal Communication Commission
FE	Facilities Engineer
FED	Facilities Engineer Division
FIA	Financial Inventory Accounting
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FSC	Federal Supply Classification
FSN	Federal Stock Number
FTS	Federal Telecommunications System
FY	Fiscal Year
G & A	General and Administrative
GAO	General Accounting Office
GFE	Government Furnished Equipment
GFP	Government Furnished Property
GOCO	Government-Owned, Contractor-Operated
GPD	Gallons per Day
GSA	General Services Administration
HQDA	Headquarters, Department of the Army
HTHW	High Temperature Hot Water
HVAC	Heating, Ventilating, Air Conditioning
IAW	In Accordance With
IBO-C	Installation Business Office-Contracting
IJO	Individual Job Order
IMC	Intermediate Metal Conduit
INSCO	Intelligence and Security Command
IPMC	Integrated Pest Management Coordinator
IPMP	Integrated Pest Management Program
ISCP	Installation Spill Contingency Plan
JOR	Job Order Request
J-SIIDS	Joint-Services Interior Intrusion Detection System
KO	Contracting Officer
LF	**Linear Feet**
LIN	Line Item Number
M&R	Maintenance and Repair
M & S	Maintenance and Service
MACOM	Major Command
MBAS	Methylene Blue Active Substances
MCA	Military Construction, Army
MCAR	Military Construction, Army Reserve
MCP	Minor Construction Program
MOA	Memorandum of Agreement
MOTBY	Military Ocean Terminal, Bayonne
MOTSU	Military Ocean Terminal, Sunny Point
MSCLANT	Military Sealift Command, Atlantic
MSDS	Material Safety Data Sheet

MUTCD	Manual on Uniform Traffic Control Devices
MWR	Morale, Welfare and Recreation
NAAS	National Arborist Association Standards
NAF	Non-Appropriated Fund
NEMA	National Electrical Manufacturers Association
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NIIN	National Item Identification Number
NOV	Notification of Violation
NPDES	National Pollution Discharge Elimination System
NSC	National Supply Center
NSN	National Stock Number
NTV	Non-Tactical Wheeled Vehicle
OCE	Office of the Chief of Engineers
OEM	Original Equipment Manufacture
OMA	Operations and Maintenance, Army
OMAR	Operations and Maintenance, Army Reserve
OPA	Other Procurement Army
OSHA	Occupational Safety and Health Administration
PBO	Property Book Office(r)
PCB	Polychlorinated Biphenyl
PCO	Procuring Contracting Officer
PDO	Property Disposal Office(r)
PM	Preventive Maintenance
PMI	Preventive Maintenance and Inspection
PMO	Provost Marshal's Office
PMOP	Preventative Maintenance and Operation Plan
POL	Petroleum, Oil and Lubricants
POV	Privately-Owned Vehicle
PVC	Poly Vinyl Chloride
PW	**Public Works**
PWS	Performance Work Statement
QA	Quality Assurance
QAE	Quality Assurance Evaluator
QASP	Quality Assurance Surveillance Plan
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RDD	Required Delivery Date
RDTE	Research, Development, Test and Evaluation
RPF	Real Property Facilities
RPMA	Real Property Maintenance Activity
RPMM	Real Property Maintenance Manager
RPMO	Real Property Maintenance Office
RR	Reliability Rate
SCA	Service Contract Act
SDDC	Military Surface Distribution and Deployment Command
SF	Square Foot (Measure)
SF	Standard Form (Document)
SPCCP	Spill Prevention Control and Countermeasure Plan
SO	Service Order
SOO	Standing Operating Order
SOP	Standard Operating Procedure
SWL	Static Water Level
TAMMS	The Army Maintenance Management System
TB	Technical Bulletin
TDS	Total Dissolved Solids

TE	Technical Exhibit
TM	Technical Manual
TN	Technical Note
TOC	Total Organic Carbon
TSS	Total Suspended Solids
UL	Underwriters Laboratory
ULD	Ultra-Low Dosage
ULV	Ultra-Low Volume
UNK	Unknown
UPC	Uniform Plumbing Code
UPH	Unaccompanied Personnel Housing
USEPA	United States Environmental Protection Agency
USPFO	United States Property and Fiscal Officer
WPCF	Water Pollution Control Federation
WWPA	Western Wood Preservers Association

3. GOVERNMENT-FURNISHED PROPERTY, EQUIPMENT, AND SERVICES.

3.1. General Information. The Government shall provide the facilities, equipment, materials, and services listed here and in the Technical Exhibits:

TE- 5. Government-Furnished Items.

3.2. Government-Furnished Property.

3.2.1. Government Furnished Facilities. The Government shall furnish or make available facilities described in Technical Exhibit 5. Government facilities have been inspected for compliance with the Occupational Safety and Health Act (OSHA). No hazards have been identified for which work-arounds have been established. Should a hazard be subsequently identified, the Government corrects OSHA hazards according to installation-wide Government developed and approved plans of abatement taking into account safety and health priorities. A higher priority for Correction will not be assigned to the facilities provided hereunder merely because of this contracting initiative. The fact that no such conditions have been identified does not warrant or guarantee that no possible hazard exists, or that work-around procedures will not be necessary or that the facilities as furnished will be adequate to meet the responsibilities of the Contractor. Compliance with the OSHA and other applicable laws and regulations for the protection of employees is exclusively the obligation of the Contractor. Further, the Government will assume no liability or responsibility for the Contractor's compliance or noncompliance with such requirements, with the exception of the aforementioned requirement to make corrections according to approved plans of abatement subject to base-wide priorities. Before any modification of the facilities performed by the Contractor at his or her expense, the Contractor must furnish the CO documentation describing, in detail, the modification requested. No alterations to the facilities shall be made without specific written permission from the CO. In the case of alterations necessary for compliance with the OSHA, such permission shall not be unreasonably withheld. The Contractor shall return the facilities to the Government in the same condition as received, fair wear and tear and approved modifications excepted. These facilities shall only be used in performance of this contract.

3.2.1.1. Facility Condition. The Government will provide the facilities in their current condition for use by the Contractor. The Contractor shall be responsible for maintenance and repairs of the occupied facilities placed at his disposal. The Contractor shall assume full responsibility for the safekeeping of facilities placed at his disposal and shall take adequate precautions to prevent or minimize fire hazards, odors, and vermin. At the completion or termination of the contract, and subsequent to a joint inspection by the Contractor and Government, these facilities shall be returned to the Government in the same condition as received with allowances made for reasonable fair wear and tear. The Contractor shall be held liable for any repair costs incurred which are caused through negligence on the part of the Contractor, subcontractor, or employee to include any administrative and inspection costs necessary to repair the facilities.

3.2.1.1.1. Custodial Services. The Government does not provide custodial services for areas utilized by the contractor; however, the Contractor is required to keep the facilities clean in accordance with TM 5-609. Cleaning of shop and restrooms shall be done weekly as a minimum.

3.2.1.1.2 Housekeeping. All work areas operated by the Contractor, specifically the Government Furnished Facilities identified in TE-5 shall be inspected daily for adequate housekeeping and findings recorded on daily QC inspection reports. All work areas and means of access shall be maintained safe and orderly.

3.2.2. Government-Furnished and/or Shared Equipment. The government shall provide the Contractor equipment listed in Technical Exhibit 5. The Contractor shall return the equipment to the Government in the same condition as received, fair wear and tear and approved modifications excepted.

3.2.2.1. Equipment Inventory. An inventory of Government-furnished equipment must be done not later than five (5) calendar days before start of the contract, within ten (10) calendar days of the start of any option periods, and not later than ten (10) calendar days before completion of the contract period (including any option periods). The Contractor and a Government representative identified by the CO shall conduct a joint inventory of all Government-Furnished Equipment (GFE) and the Contractor shall sign a receipt for all equipment provided by the Government. Items of equipment missing or not in working order shall be recorded and the CO notified in writing. The Contractor

and the Government representative shall jointly determine the working order and condition of all equipment and document their findings on the inventory. In the event of disagreement between the Contractor and the Government representative on the working order and condition of equipment, the disagreement shall be treated as a dispute under the contract clause entitled "Disputes."

3.2.2.2. Government Replaced. The Government will provide to the Contractor the GFE listed in TE 5 and will replace the equipment when it becomes unserviceable due to fair ware and tear. In the event the GFE becomes unserviceable and uneconomical to repair, the Contractor shall immediately notify the CO. The CO shall make final determination whether the equipment is unserviceable. The notification shall include: the description of the equipment, the estimated cost to repair, age, the estimated cost to lease, and the estimated cost to replace with new GFE of a similar kind, justification of the need and an economic analysis. The Government will determine the method of replacement based on the economic analysis and requirements of the five-year equipment plan. Replacement of unserviceable GFE will be made only after the written approval of the CO. Title to the new equipment will remain with the Government.

3.2.3. Government-Furnished Materials. The Government will furnish the tree seedlings (ref. Section 5.6.5.20.).

3.3. Government-Furnished Services

3.3.1. Government-Furnished Utilities. These utilities shall be provided to GFE, offices and facilities only. Usage of utilities shall comply with MOTSU's Energy Management Plan.

3.3.2. Telephone Services (official business and intra-post calls only).

3.3.3. Orientation. Before the contract start date, the Government will provide to the Contractor's key management and supervisory personnel, the follows:

3.3.3.1. Operations Briefing.

3.3.3.2. Safety and Fire Protection Briefing.

3.3.3.3. Site Inspection/Tours.

3.3.4. Emergency Medical Service. Medical services for Contractor's personnel are the responsibility of the Contractor. However, the Government will provide, on an emergency basis, medical service for job-related injuries while an employee is performing the contract. The Contractor shall reimburse the Government for emergency medical services provided upon receipt of invoice from the medical facility. Medical services consist of Emergency Medical Technicians and a Dispensary with a nurse on duty.

3.3.5. Parking. The Contractor will be assigned by the CO five (5) parking spaces for Contractor employee POV parking in the headquarters parking lot on a first-come first-serve basis. Additional spaces will be designated in the Gas Station parking lot as needed. Contractor POV's are prohibited for parking within the fenced in area surrounding building 4 or the Logistics' Division parking lot.

3.3.6. Vehicle Washing. All Contractor owner vehicles/equipment used to perform contract services shall be washed off terminal.

3.3.7. Fuel. Contractor will be responsible for providing fuel for all Contractor furnished equipment in performance of this contract. The Contractor will pay fuel cost for all shared equipment while in his use.

4. CONTRACTOR-FURNISHED ITEMS AND SERVICES.

4.1. General Information. Except for those items or services specifically stated in Section 3 as Government furnished, the Contractor shall furnish everything needed to perform this contract according to all its terms.

4.1.1. Contractor Requirements.

4.1.1.1. Identification/Marking. The Contractor's company name shall be marked on the sides of over-the-road vehicles in an appropriate place, normally the doors. A corporation logo is optional.

4.1.1.2. Vehicle Registration. The Contractor shall obtain and shall require all Contractor personnel to obtain, vehicle passes/decals from the Provost Marshal prior to commencement of contract work on the Government Installation. Vehicle passes/decals shall be returned by Contractor to the Provost Marshal within twenty-four (24) hours when any employee is no longer in the services of the Contractor. All passes/decals shall be returned upon completion or termination of the contract.

4.1.1.3 Manufacturers' Manuals. The Contractor shall obtain two (2) copies of manufacturer's operating instructions and maintenance manuals on all new equipment installed by the Contractor. The Contractor shall provide one (1) copy of all such documents to the CO for inclusion in the technical library. The second copy of these manuals and operating instructions shall be maintained by the Contractor and shall become the property of the Government at the expiration or termination of the contract.

4.1.1.4. Supplies, Parts, and Materials. All Contractor furnished supplies, parts, and materials used in maintenance, repair or replacement shall be new and of the quality equal to or better than the items to be replaced. All electrical and fire alarm items shall be UL listed and labeled. The items used shall be standard products of manufacturers regularly engaged in the production of such items. Contractor-furnished items found not meeting acceptable standards shall be replaced by Contractor at Contractor's expense.

4.1.1.5. Equipment Safety. The Contractor shall comply with all State. Federal and Local laws, regulations and codes as pertaining to safety in the applicable sections of EM 385-1-1, Corps of Engineers, Safety and Health Requirements Manual (latest edition).

4.1.1.6. Equipment Down Time. The Contractor shall ensure all Contractor-furnished equipment is operational at all times throughout the life of the contract. If extended down time is expected due to required repairs, the Contractor must insure that an adequate replacement is available to preclude a decrease in service performance. Such temporary equipment will be at no additional cost to the Government.

4.1.1.7. Inoperable or Unserviceable Contractor Equipment Contractor-furnished equipment or items, which become inoperable or unserviceable, for whatever reason, including failure to meet Federal, State, or local safety requirements, shall be removed from the installation by the Contractor, within twenty-four (24) hours after the failure at no additional cost to the Government. Such failures shall not be cause for the Contractor to reduce any service or performance in the contract. Maintenance or lack of maintenance of Government or Contractor-furnished equipment or lack of repair parts, supplies, or materials shall not be cause to reduce any work or service.

5. SPECIFIC TASKS.

5.1. General. The Contractor shall perform to the standards in this contract. All work shall be accomplished to completion. Examples stated herein are representative in all areas and should not be construed to be inclusive. Work areas shall be cleaned after the work has been performed. Cleaning shall include the removal of all smudges, grease, stains, dirt, paint drips, debris, and refuse resulting from the Contractor's work. Carpet, which is soiled during repair activities, shall be cleaned according to the manufacturer's recommendations. Glazing materials shall be cleaned as part of the replacement activity. Appliances installed or serviced shall be cleaned to remove all smudges, grease, and other marks resulting from the Contractor's work. The Contractor shall strictly adhere to cleaning up immediately after repairs are completed in Government quarters and all other occupied areas. Special attention shall be given to clean-up activities in vacant quarters. Dilapidated, waste and unusable excess materials shall be removed from the Terminal to an approved waste site in a timely manner.

5.1.1. **Maintenance Management Services.**

5.1.1.1. General. Work requirements are grouped into two (2) major categories: Level I Preventive Maintenance (PM) and Level II Service Orders (SO). Level II work will be generated by the Government as a service call.

5.1.1.2. Level I - Preventive Maintenance (PM). The Contractor shall provide all personnel, equipment, tools, materials, supervision, and other items and services necessary to perform and document the status and completion of all Level I work. Service Orders will not be issued for PM work.

5.1.1.2.1. PM Program. The PM program is designed to minimize future repair requirements and keep each system or component operating properly.

5.1.1.2.1.1. Minor Maintenance and Adjustments. The PM program also includes inspecting, testing, cleaning, adjusting, calibrating, and other minor maintenance and corrections. The Contractor shall provide ail minor maintenance materials, lubricants, refrigerants, filters, belts, fittings, indicator light bulbs, fasteners, etc. required to perform these services as part of the PM.

5.1.1.2.1.2 Integrated Facilities System (IFS). The Contractor shall utilize and familiarize themselves with the Government Computer Program to track and manage all PM work orders and Service Order. The program and a tutorial will be made available to the Contractor. The IFS system is the current program that the Government requires for all U.S. Army installations in the Continental U.S. The Contractor will be required to use the program as part of their Preventive Maintenance and Operation Plan.

5.1.1.2.2 Preventive Maintenance and Operation Plan (PMOP). The Contractor shall develop and submit an annual PMOP. This plan shall be submitted to the CO for acceptance seven (7) calendar days prior to contract start date, and by the 1st of September for subsequent contract years. The Contractor shall provide to the Government an electronic copy of the PMOP and any schedule required and a means to review the files. This may include providing and supplying the management software required to view the PMOP in it's entirety. Any license required to use and operated the software shall be the responsibility and purchased by the contractor. To minimize the amount of paper, updates shall be provided in the form of electronic file. The schedule(s) shall be kept current and copies of all work schedules shall be made available for CO review. If the Contractor becomes delinquent in meeting this PMOP schedule (by 10 percent), he shall hire or otherwise acquire additional personnel in order to meet the stated schedule.

5.1.1.2.2.1. This plan shall include:

5.1.1.2.2.1.1. A description of each item of equipment or facility to include the building number, location, equipment name, nomenclature, and serial number.

5.1.1.2.2.1.2. A detailed PM schedule for all functional areas specified in Sections 5.2 through 5.9. The schedule shall separate each functional area and reference the specific equipment item being maintained by equipment identification number and building number, equipment name and equipment location. Lists of equipment to be maintained are provided with each functional area in supporting Technical Exhibits.

5.1.1.2.2.1.2.1. Functional areas must break down daily, weekly, bi-weekly, monthly, quarterly, semi-annual and annual tasks, as well as annual start-up and shutdown work.

5.1.1.2.2.1.2.2. All work must be itemized by specific equipment and tasks to be performed and include estimated labor hours for these tasks and associated start and stop dates.

5.1.1.2.2.1.2.3. All tasks in the PMOP must reflect and adhere to current maintenance recommendations (to include manufacturers' recommendations and instructions). Identification of major systems as a piece of equipment or task is not sufficient.

5.1.1.2.2.2. Changes. Due to operational requirements, the PM schedule can be changed or revised at any time during the contract with prior permission from the CO.

5.1.1.2.2.2.1. Government Changes to the PM Schedule. The CO will notify the Contractor in writing at least five (5) working days prior to the originally scheduled PM date.

5.1.1.2.2.2.2. Contractor Changes to the PM Schedule. Changes to the PM schedule by the Contractor must be submitted to the CO in writing at least five (5) working days prior to the originally scheduled PM date. No scheduled PM dates will be changed without the prior approval of the CO.

5.1.1.2.3. Work Clearance. For scheduled work involving disruption of any or all of the following: traffic flow, post utility services, protection provided by fire and intrusion alarm systems, routine activities of the installation, or for work involving digging operations, the Contractor shall provide the CO with a Facility Engineer Work Clearance Request five (5) working days prior to work commencement. For emergency situations involving digging operations in which prior written notification is not feasible, the Contractor shall locate and stake out all utility pipes/cables prior to commencing excavation operations.

5.1.1.2.3.1 Utility Location. The Contractor shall locate and stake out underground utility pipes/cables prior to digging operations. The CO will issue a service order to accomplish this service.

5.1.1.2.3.2 Digging. Mechanical digging shall not be permitted within three (3) feet of identified underground utilities. If marked or unmarked underground utilities are damaged by digging, the contractor shall repair or have them repaired at no additional costs to the Government. All repairs shall restore the utility to full operation within eight (8) hours.

5.1.1.2.4. Work Coordination. The Contractor will be issued keys to most facilities on MOTSU. If the contractor does not have keys to a certain facility, then he shall prearrange and coordinate with the requester for access to facilities. The Contractor shall report to the CO instances where access could not be obtained to facilities because the requester failed to be available at the prearranged time. The Contractor shall leave a notice and phone number after his attempt to perform work, and return to requesters' location after subsequent coordination and appointment by occupant. When reporting such instances, the Contractor shall provide the CO with a copy of the work document and pertinent facts related to the incident, such as the number of attempts to obtain access. If work requires scheduled or unscheduled interruption disconnect or cut-off of any utility to or within the facility, or that a facility be vacated, the Contractor shall take action (five (5) work days in advance if interruption is scheduled) to:

a.) Notify customers/facility users and the CO at least five (5) days in advance of utility shutdown.

b.) Avoid damage to customer equipment.
c.) Minimize disruption of the activity's operation.

5.1.1.2.5. Drawings. The Contractor shall redline and update installation drawings and as-builts to reflect any changes that result from work performed by the Contractor. Markups of drawings shall be performed within fifteen (15) working days after completion of the work that resulted in the change to the drawing(s).

5.1.1.2.6. PM Records Maintenance. The Contractor shall maintain PM records in electronic and hard copy form. A CD with all PM records listed for the past year shall be presented to the CO on the anniversary of this contract. Any special software required to read this CD shall also be presented to the CO. Hard copies of completed PM work orders shall be made available to the CO upon request. At the expiration or termination of this contract, the contractor shall provide a hard copy of all PM records completed during the total contract period. These records shall be placed in document file boxes, each box identified and delivered to a location as directed by the CO. PM records shall reflect periodic maintenance performed, including scheduled and accomplished dates. The Contractor shall update the PM records current within three (3) workdays following performance of the PM.

5.1.1.2.7. PM Reports. After a PM inspection is made, the Contractor shall record the results of such an inspection and report any identified defects or deficiencies to the CO within three (3) working days. Defects or deficiencies identified by the Contractor, which may result in risk to persons or property shall be reported to the CO immediately via telephone. The Contractor shall supply a hard copy and an electronic copy form of the completed inspection record report to the CO. The inspection record report shall contain the following information:

a.) Date of inspection.
b.) Equipment location.
c.) Equipment ID of the equipment requiring preventive maintenance.
d.) Equipment name.
e.) List of defects or deficiencies noted during PM and an indication as to whether corrected or deferred.
f.) If applicable, reason for deferral or deficiency.
g.) Labor hours expended by employee number.
h.) List of materials used for PM inspection by part/stock number and cost.
i.) Estimate of man-hours and materials needed to correct defect or deficiency.

5.1.1.2.8. PM Stickers. Upon completion of the PM inspection, the Contractor shall attach a sticker to the equipment item label plate or in the immediate vicinity thereof) indicating the equipment ID number, the date of the maintenance, and the initials and identification number of the Contractor employee who performed the work.

5.1.1.2.9. Defects or Deficiencies Found During PM. Although the manufacturers' maintenance recommendation may require maintenance checks or repairs on a cyclical basis (e.g., quarterly, semi-annually), these cyclical PM requirements do not relieve the Contractor "from performing maintenance/repair on these systems or equipment at other times of the year. If the systems or equipment are in need of repair or maintenance, the Contractor shall notify the CO of the requirement and not put off the required work until the next required cycle check.

5.1.1.2.10. Utility, Mechanical or Electrical Equipment Replacement.

5.1.1.2.10.1. Replace vs. Repair. The contractor shall be given the option of replacing verses repairing any equipment or system. However, there shall be not additional costs to the Government for any replaced items. Any items replaced shall be of a like or better quality. Any replaced electrical item shall be UL listed and labeled.

5.1.1.2.10.1.1. Documentation. If an item of Government property which has a value exceeding $10,000.00 is determined by the Contractor to be beyond economical repair, the Contractor shall recommend to the CO in writing that such equipment be replaced. Supporting information presented to the CO must include the following:

a.) The age or purchase date and original cost of the equipment recommended for replacement.
b.) Equipment Model and ID number.

c.) The cost of repair parts to bring it up to a fully operational level.

d.) The availability of replacement parts.
e.) The rationale for replacement rather than repair.

f.) Whether or not the replacement equipment will fit into the available space, performs the required function, and operates on available installed utility services.

g.) Three sources for any new equipment or systems, complete with current cost data and availability.

5.1.1.2.10.1.2. Salvage. The Government retains all salvage rights to replaced property of value. The Government will determine the value of the property. Items of no value shall be disposed of at the Contractor's expense. For items of value, and for all Government equipment regardless of value, the Contractor shall prepare DD Form 1348-1 for property disposal.

5.1.1.2.11. Warranty. The Contractor shall exercise manufacturers commercial warranties on Government equipment on the Government's behalf. The Contractor shall report any difficulty in exercising manufacturers warranties to the Contracting Officer and request his assistance as necessary. It is the Contractor's responsibility to correct equipment, regardless of the manufacturers actions. If the manufacturer fails to honor the warranty, it shall not relieve the Contractor of this responsibility.

5.1.1.2.11.1. The Contractor is responsible for invalid warranties due to poor workmanship or by not following manufacturers' installation or operating instructions. Replacements and repairs will be at the Contractors expense.

5.1.1.2.11.1.1. Warranty Monitoring. The CO will provide the Contractor all available information on warranties for equipment and facilities pertaining to the contract within thirty (30) calendar days following the contract award date. Throughout the contract term, as additional work is completed and accepted by the Government, the CO will provide the Contractor with warranty information on the equipment and facilities pertaining to the contract. The Contractor shall maintain and update this data and be prepared to advise the CO of the warranty status of equipment and facilities covered under the contract upon request. All warranty data shall be returned to the Government at contract completion or termination. Warranted equipment, and component parts other than equipment or parts installed under the contract shall not be removed, or replaced or have deficiencies corrected while still under warranty of the manufacturer or the installer, except as directed in writing by the CO. All defects in workmanship or material, defective parts, or improper installation found by the Contractor shall be reported to the CO. The Contractor shall be responsible for knowledge of the equipment and components that are covered by original warranty and the duration of that warranty. When Contractor personnel, in response to a service order or other work requirement, determine that a warranted item not installed by the Contractor requires service, the Contractor shall notify the CO in writing no later than 0900 hours of the next working day, or give telephone notification within fifteen (15) minutes of detection if the deficiency threatens damage to personnel or property. The CO will direct the Contractor to: (1) repair the deficiency, if potential damage may result from deferring repairs; or (2) clean the work area and stop work. The Contractor shall not receive payment for work not authorized by the CO, which is performed on warranted equipment, unless the CO concurs that such work was a legitimate response to a true emergency condition.

5.1.1.2.12. Permits and Fees.

5.1.1.2.12.1. The Contractor is responsible for renewing annual permits and the payment of associated fees shown in Technical Exhibit 6. A copy of all permits and receipts for paid fees shall be made available to the CO upon request.

5.1.1.2.13. Engineering Support Services.

5.1.1.2.13.1. Operational/Functional Reviews. The Contractor shall review and make recommendations, on Corps of Engineers (COE), Architecture and Engineering and Division of Public Works design and construction drawings for functional, operational, maintenance and reparability of the projects. Recommendation shall be based on whether the drawings are workable and compatible with existing facilities and systems and shall be submitted to the Division of Public Works within one (1) week of request. The Contractor shall document reviews on Government approved checklist. Approximately one hundred-fifty (150) man-hours will be required annually as part of the firm fixed-price for Service and Maintenance Management.

5.1.1.3. Level II - Service Orders (SO). The Contractor is responsible for all Level II work up to $10,000 (including all direct labor and material costs only) per job as part of the basic contract price. Work Level II requirements over

$10,000 per job will be accomplished by separate contractual actions. All Level II work will be performed via the issuance of a Service Order (SO).

CAUTION: All work over the Level II amount, except for emergency work, must be approved: in writing by the CO prior to performance. Any work, which is performed by the Contractor without such authority will be performed at the Contractor's own risk. Any emergency work which the Contractor claims exceeds $10,000 must be approved by the CO prior to initiation of work, or if that is impracticable, at the earliest possible time; however, in no event should the Contractor take more than eight (8) hours to inform the CO. Failure to adhere to the aforementioned may preclude the Contractor from receiving an equitable adjustment in the contract price for emergency work performed in excess of $10,000.

5.1.1.3.1. Service Order Priorities and Response. The CO will classify and assign a priority to each service order. The Contractor shall respond to the request within the time limits established below. The Government reserves the right to review each service order and change priorities when deemed necessary, or cancel the SO at any time if it is deemed unnecessary.

5.1.1.3.1.1. Priority #1. A priority #1 SO takes priority over all other work. The Contractor shall respond within one (1) hour of receipt of notification of a priority #1 SO. The Contractor shall respond within thirty (30) minutes for an electrical power outage. The contractor shall respond immediately if any priority #1 SO is declared an emergency. Work on priority #1 shall continue around the clock until the situation is corrected. Permanent correction or repair of the hazard shall be completed within ten (10) working days of the initial receipt.

5.1.1.3.1.1.1. Emergency Work Notification. The Contractor shall provide a non-duty hour (4:01 PM through 7:29 AM) telephone number that is answered, seven (7) days per week, three hundred sixty-five (365) days of the year.

5.1.1.3.1.2. Priority #2. A priority #2 shall be responded to within three (3) working days of receipt of notification. Permanent correction or repair of the work shall be completed within ten (10) working days of the initial receipt.

5.1.1.3.1.3. Priority #3. A priority #3 shall be responded to and permanent correction or repair of the work shall be completed within (30) calendar days of the initial receipt.

5.1.1.3.2. Work Reception and Processing.

5.1.1.3.2.1. The Government shall initiate and the Contractor shall receive, process, respond to, and report service orders approved by the CO. The Contractor will also be responsible for developing, inputting, updating, and maintaining a tracking system to record all approved service orders. The status of all assigned and completed service orders shall be made available to the CO.

5.1.1.3.2.2. Reception Desk. The Contractor shall operate a work control and reception desk for receiving Government generated service orders. Each service order generated by the Government will have an origination date and origination time entered on the work document.

5.1.1.3.2.3. Service Order Work Documentation. The CO or authorized designee may call into the Contractors work control/reception desk to issue a service order. In general, the type of information provided by the CO or a designee will be:

a.) Work/problem nature and priority.
b.) Equipment ID if equipment related (if readily available).
c.) Customer job order number.
d.) Location of service work requirement.
e.) Name and telephone number of requester.

5.1.1.3.2.4. Processing and Tracking. The Contractor shall record and track the following information:

or service order was received from the CO or designee.
b.) Date/time Contractor responded on-site.

c.) Priority identified by the CO.
d.) Brief description of service work required.
e.) Location of service work requirement.

f.) Name and telephone number of requester.
g.) Equipment ID if applicable.
h.) Customer job order number.
i.) Date/time service order completed.
j.) If priority 1 or 2, date/time permanent correction completed.
k.) Status of service order (ex. open with projected completion date or completed).

5.1.1.3.2.5. Status. The Contractor shall make available a daily update on the status of all Level II work to include all work that has been completed and awaiting inspection by the Government. In addition, all work that was completed by the Contractor and found to be unsatisfactory by the Government shall be reworked by the Contractor within two (2) days after notice (either verbal or written) of unsatisfactory performance.

5.1.1.3.2.6. Back Orders. Service orders awaiting parts are not exempt from response and completion times. The Contractor is expected to keep a stock of replacement parts or have a vendor identified from which parts can be purchased in order to meet the documented response and completion times.

5.1.1.4. Meetings. The Contractor may be required to attend weekly scheduled maintenance meetings with the CO or as requested by the CO. The Contractor may also be required to attend the weekly Commanders Staff Meeting.

5.1.1.5. Records and Reports.

5.1.1.5.1. Records. The Contractor shall retain all hard copy PM records and service orders for the life of the contract. Upon completion of the contract all hard copy records shall be boxed and identified as to the contents and turned over to the CO. Electronic records and data entered and maintained are the sole property of the Government both during the contract and after contract completion.

5.1.1.5.2. Monthly Reports.

5.1.1.5.2.1. Level I and Level II Work. The Contractor shall create and submit to the CO a master schedule, which itemizes all assigned Level ll work. Hard copies of the schedule as well as a computer CD disk containing the actual schedule (source data as compiled by the originating software) shall be submitted each month. The CO shall receive the schedule by 9:00 A.M. on the second business day of the month. Upon submission of the schedule, the Contractor shall meet with the CO or a designee and personnel from the Division of Public Works to discuss, and make changes to the schedule. As needs arise, the Government may direct changes to the schedule at any time during the work cycle. The Contractor shall change the schedule based on this meeting, and resubmit the schedule to the CO for final approval not later than 9:00 a.m. on the fourth business day of the month. The CO must approve the Contractors schedule. Deviating from the approved schedule is prohibited without CO approval.

5.2. ELECTRICAL PLANTS AND SYSTEMS.

5.2.1. General. The Contractor shall provide all personnel, equipment, tools, materials, supervision, and other items and services necessary to operate, inspect, maintain, and repair electrical plants and systems at Military Ocean Terminal (MOTSU), Sunny Point.

CAUTION: HIGH VOLTAGE EQUIPMENT IS EXTREMELY DANGEROUS. CONTRACTOR SHALL CAUTION ALL CONTRACTOR PERSONNEL HANDLING AND WORKING WITH HOT WIRES. THE CONTRACTOR'S QC PLANS AND SCHEDULES SHALL PROVIDE DETAILED SPECIFICS AS TO HOW CONTRACTOR PLANS TO PROVIDE THAT HIS PERSONNEL TAKE THE NECESSARY PRECAUTIONS. THE CONTRACTOR SHALL REQUIRE PROPER SAFEGUARDS.

5.2.2. Background Information. Electrical services shall be provided at MOTSU post-wide. . The secondary distribution system is a 120/208volt 3-phase 4-wire wye system with the exception of the loading wharves which are

480 volt 3-phase 4-wire wye system and open carpenter's shed which is delta 120/240 volt. There are several small buildings served by a single-phase 120/240-volt line. In addition to the foregoing there are 61 battery chargers, twelve (12) emergency generators, two (2) overhead traffic warning lights, six (6) automatic gate (barrier) operators, five (5) overhead doors, two (2) overhead electric cranes, and miscellaneous smoke, fire and intrusion alarm systems. See Technical Exhibits for a listing of electrical systems and components

TE-1 Performance Requirement Summary,
TE-2 Workload Estimate,
TE-3 Maps and Work Area Locations,
TE-4 Required Reports,
TE-5 Government-Furnished Items,
TE-8 Electrical Plant and Systems,
TE-9 Scheduled Maintenance Intervals for Fire Alarm,
TE-10 PM Schedule – Electrical,
TE-11 PM Schedule – Water Systems,
TE-16 Building Characteristics,
TE-33 Electrical Requirements for Facilities at MOTSU.

5.2.2.1. All available drawings, electrical system overview, specifications, and available detailed system drawings are located in the Public Works Building, Building 4 at MOTSU.

5.2.2.2. License/Qualification. All electrical work done on MOTSU shall be performed by personnel authorized to engage in electrical contracting within the state of North Carolina and shall hold a North Carolina electrical license. This contract shall require a North Carolina Unlimited Electrical license. An electrical license from another state may be acceptable if it qualifies under North Carolina's reciprocity process. A copy of the unlimited electrical license shall be submitted with the Contractors' final bid. If a journeyman electrician actually performs the electrical work and does not possess an acceptable electrical license and is in fact working under someone else's license, then the holder of the unlimited electrical license shall physically inspect and make any required corrections, at the end of each day's work, for all work performed by the unlicensed journeyman. A record of all such inspections and corrections shall be maintained by the Contractor and shall be submitted to the COR when requested.

5.2.2.3. Any time ship loading/discharging operations are in process at MOTSU an electrician must be on duty. In addition to regular working hours an average for the past three (3) years of seven hundred thirty (730) Man-hours of weekend days and evening shift work was required.

5.2.2.4.. All electrical work done on MOTSU shall be done IAW TE-33 (Electrical Requirements for Facilities on Military Ocean Terminal, Sunny Point (MOTSU), NC), the latest editions of the National Electrical Code (NEC), National Electrical Safety Code (NESC), National Fire Protection Association (NFPA) 101 Life Safety Code, and the requirements of this Section. The stricter requirement shall be utilized. There shall be no deviation allowed from these requirements.

5.2.3. Level I, Preventive Maintenance (PM) Tasks and Standards.

5.2.3.1. Operations: The Contractor shall operate the secondary distribution systems and shall provide efficient distribution of power, to ensure power availability twenty-four (24) hours each day of the year.

5.2.3.1.1. Notification of Scheduled System Outages. The Contractor shall coordinate all scheduled outages with the CO at least forty-eight (48) hours in advance. The Contractor shall attend all planning meetings that may affect the power systems the Contractor operates and maintains. The CO will notify the Contractor no less than one (1) day (one hour for emergencies) prior to the start of such meeting.

5.2.3.1.2. Unscheduled System Outages. See 5.2.4.3.

5.2.3.1.3. All other electrical systems and components shall have a reliability rate of not less than 99.9 percent. A Priority #1 service order (SO) shall be responded to within one (1) hour and repair work shall continue until the situation is corrected, a permanent repair shall be accomplished within ten (10) business days. A Priority #2 SO shall be responded to within three (3) business days and a permanent repair shall be accomplished within ten (10) business days. A Priority #3 SO shall be responded to and repaired within thirty- (30) calendar days of initial notice.

5.2.3.1.4. Maps, Records, and Reports. The Contractor shall maintain the following records and logs and submit them to the CO at the time and in the format specified in TE-4. Additionally, system maps, as-built plans "hardcopy Red-Lines", and records shall be kept up-to-date by the Contractor, to include: re-routing of cables or wires, installation of new equipments or removal of existing electrical devices. The contractor shall maintain a complete copy of all changes and shall submit a complete and verified copy of all drawing changes to the CO within five (5) business days following accomplishment of any system change.

5.2.3.1.4.1. Operating Logs.

5.2.3.1.4.2. Inspection Results. The Contractor shall report in writing the results of PM or operating problems to the CO on the last working day of each month unless otherwise required due to emergencies requiring immediate notification of a serious system or safety concern.

5.2.3.1.4.3. The Contractor shall report telephonically to the CO any major electrical item of equipment that will be out of service for more than two (2) hours by 1500 hours of each business day. Subsequent reports shall be provided on a daily basis until repairs are completed.

5.2.3.2. Scheduled Maintenance: See TE-10 for listings of equipments requiring maintenance and some recommended schedules. For items shown without a recommended maintenance schedule, the Contractor shall utilize the manufactories recommended schedule of maintenance as guidance for scheduled maintenance. The Contractor is responsible for, and shall provide an inspection preventive maintenance program, which shall ensure that all critical system reliability rates and all standards are met. The Contractor's work and services shall be accomplished IAW the latest National Electrical Code (NEC), applicable manufacturers' instructions and best commercial practice. Any parts replaced shall be UL listed and labeled, unless specifically approved by the CO. Upon completion of any maintenance work, the equipment and its components shall be clean and not have any missing or damaged parts. All corrosion, both inside and outside the device (to include rust), shall be removed, and then the item shall be primed and painted to match the existing color and texture. All components and parts shall be tight fitted. All lubrication shall have been accomplished and all fluid levels shall be at specified levels and be of the specified type, and the equipment shall operate, or be able to operate at its design limitations at not less than the required efficiency levels.

5.2.3.2.1. The manual and automatic transfer switches shall be exercised monthly, without interruption of critical electrical loads.

5.2.3.2.2. During generator operation, the Contractor shall refuel the generator as required for continuous operation.

5.2.3.2.3. The Government will furnish fuel required for operation of the generators. The responsibilities for requesting fuel shall be the Contractor's.

5.2.3.2.4. For any Government owned or rented portable generators being utilized, the Contractor shall make all connections, take hourly readings and check for proper operation. The Contractor is responsible to insure that all generators in service are fueled regularly to preclude service interruptions.

5.2.3.2.5. The Contractor shall be responsible for maintenance and repair of, battery chargers, HQ RADDS data collection and fire alarm systems. This listing is not to be considered all-inclusive, but is to be considered a minimum listing.

5.2.3.2.6. Outdoor Lighting Systems and Equipment. The Contractor shall be responsible for maintenance and repair of streetlights, area lights, floodlights, wiring and related systems as listed in TE-10. All outdoor lighting systems shall be inspected during nighttime hours bi-monthly. The Contractor shall be responsible for scheduling

and completing all necessary repairs and maintenance by the end of each month during normal working hours. The Contractor is responsible for scheduling and repairing any malfunctioning controls, lamps, ballast, fixtures, conduit, junction boxes, switch panels, wires, photocells, etc. he discovers or as reported as failed by others. All this work is considered Level I work without exception.

5.2.3.2.7. Disconnect and Transfer Switches. At least annually (or as required by the equipment manufacturer) and when a malfunction occurs, the Contractor shall maintain and repair disconnect and transfer switches shown in TE-11. The Contractor shall also: clean and lubricate contacts and blades IAW the equipment manufacturer's recommendations; check for friction in moving parts and for signs of heating on current carrying parts and correct as required; inspect for loose or missing hardware and make necessary adjustments and/or replacements; check that the arcing contacts make contact before the main contacts engage and that they break only after the main contacts have been opened; make all necessary adjustments as required. The Contractor shall clean the frame, insulators, and current carrying parts of all foreign material. Upon completion of any maintenance work, the Contractor shall ensure the equipment and its components are clean and not have any missing or damaged parts. All corrosion, both inside and outside the device (to include rust), shall be removed, and then the item shall be primed and painted to match the existing color and texture. All components and parts shall be tight fitted. All lubrication shall have been accomplished and all fluid levels shall be at specified levels and be of the specified type, and the equipment shall operate at its design limitations. At least annually, the Contractor shall disconnect the electrical feed into all automatic transfer switches causing them to trip. The Contractor shall verify they trip IAW the manufacture's requirements and if not, he shall repair or adjust each switch up to the manufacture's specifications. The Contractor shall maintain a checklist verifying these accomplishments; this checklist shall be available to the CO upon request.

5.2.3.2.8. Electric Meters. BEMC shall monthly read all electrical meters on MOTSU. They shall provide the FMC contractor an approved EXCEL spreadsheet with the latest meter readings. This data may be utilized and entered into the HQ RADDS Webb based database by the contractor.

5.2.3.2.9. Battery Charger Systems. The Contractor shall inspect and maintain the battery charging systems listed in TE-11 IAW the manufactory's recommendations and safe operating principles as presented in the latest edition of the NEC, Corps of Engineers "Safety and Health Requirements Manual", and the NESC. This shall also include all ventilation and eyewash systems located at each battery charger site.

5.2.3.2.10. Data entrance into HQ RADDS Webb Site. The Contractor shall record on a COR approved spreadsheet the monthly MOTSU wide (to include the family housing area, railroad crossings and Leland exchange) usage of electricity, fuel oil, propane, potable water and vehicle diesel fuel and gasoline. This data shall include the quantities and costs for these utilities. The Logistic Division will provide the monthly vehicle diesel fuel and gasoline data to the Contractor, which shall also be entered into the RADDS database. All other monthly data (electricity, fuel oil, propane and potable water) shall be gathered by the Contractor from monthly invoice statements that will be made available by the CO. The Contractor shall then utilize this spreadsheet data to enter the required monthly data into the HQ RADDS Web site. The COR shall provide the address to this Webb site.

5.2.3.2.11. Fire Alarm System. The Contractor shall inspect and maintain the Terminal wide fire alarm system and devices as listed in TE-9. Fire alarm inspections shall be IAW with all requirements of NFPA-72. Only personnel who have a minimum of five years experience in the inspection, service and repair of fire alarm systems and possess, as a minimum, a current Fire Alarm Level II certificate from NICET in the sub-field of Fire Protection Engineering Technology (Fire Alarm System) shall be allowed to inspect, maintain and repair this system. See Section 5.5. for additional requirements relating to fire alarm testing and repairs.

5.2.4. Level II Service Orders (SO) Tasks and Standards.

5.2.4.1. The Contractor shall perform Level II service order work as defined in Section 5.1.1.2. Level II - Service Orders (SO).

5.2.4.2. Level II - Service Orders (SO) shall be accomplished in accordance with standards established in this contract on low voltage electrical distribution, lighting systems, appliances, alarms and other electrical systems. Upon completion of any unscheduled maintenance or repair work, the equipment and its components shall be clean

and shall have no missing or damaged parts. All corrosion, both inside and outside the device (to include rust), shall be removed, and then the item shall be primed and painted to match the existing color and texture. All components and parts shall be tight fitted. All lubrication shall have been accomplished and all fluid levels shall be at specified levels and be of the specified type, and the equipment shall operate at its design limitations.

5.2.4.3. Unscheduled Maintenance and Repair Standards. The Contractor shall perform unscheduled maintenance, repair or upgrade modifications to all low voltage electrical distribution systems, lighting systems, appliances, alarms and all other electrical systems on MOTSU (to include the housing area and the Leland interchange). The Contractor shall troubleshoot; diagnose; disassemble; fabricate or replace sub-elements (all sub-elements shall meet manufactures requirements); repair; reassemble; align; and perform quality tests to ensure proper functioning of the device IAW manufacturer's stated outputs and all requirements of the NEC and Corps of Engineers “Safety and Health Requirements Manual”. The Contractor shall also interpret manuals, blueprints, sketches, schematics and specifications for all work performed. Any changes to the original installation shall be documented as “red line” drawings and given to the CO within seven (7) days of final repair.

5.2.4.4. Typical Tasks Performed. Typical unscheduled maintenance, repair and upgrade modification tasks performed by the Contractor include (but shall not be limited to): emergency repairs of the low voltage electrical distribution system and area lighting components damaged by storms or other acts of God; motor vehicle accidents and end of life failure; repair or replacement of electrical low voltage distribution equipment; troubleshooting problems in the low voltage electrical or lighting distribution systems; repairing, replacing and modifications to feeder and service lines and repairing, replacing and installing residential and commercial electrical and lighting fixtures; and installing additional lights, switches, outlets and alarm stations. The Contractor's work shall include low voltage splices, and maintenance, repair or replacement (as needed) of all low voltage (secondary) electrical components and accessories on MOTSU.

5.3. WATER PLANTS AND SYSTEMS.

5.3.1. General. The Contractor shall inspect maintain and repair the water distribution systems, described below: The Contractor shall be responsible for the proper and continuous operation of these plants and systems twenty four (24) hours a day, seven (7) days a week.

5.3.1.1. Certification of Water Treatment Facility Operator. The Contractor shall require the operator in charge of the Water Treatment Facility to hold a valid "C-Well" certificate or higher issued by the NC Water Treatment Facility Operators Board.

5.3.1.2. Plumbing License. The Contractor shall employ on a full time basis as a minimum, one (1) master plumber who possesses a Class I valid NC State Plumbing License.

5.3.1.3. Distribution Operator License. The contractor shall be required to have available a person with a NC Class C water distribution operator license.

5.3.1.4. Background Information. Water Plant and Systems services shall be provided at MOTSU post-wide including the Family Housing Area as identified in this section and;

TE-1 Performance Requirement Summary,

TE-2 Workload Summary,

TE-3 Maps and Work Area Layouts,

TE-4 Required Reports,

TE-12 Valves and Hydrants,

TE-15 PM Schedule – Sewer and Waste Water Systems,

TE-16 Building Characteristics.

5.3.2. System Overview. The system includes all water mains, service lines, hydrants, valves and meters as shown in the General Water Map in TE-3. Contractor's responsibility includes all water system components. Primary potable water for the MOTSU water system is supplied by Brunswick County via a twelve (12) inch PVC line. The contract with the county permits MOTSU to purchase up to 400 thousand gallons per day (TGD). The total average daily usage is 100 thousand gallons per day. The mean age of the system is thirty-one (31) years. The main supply from the county was installed in 1989. Additional water mains have been installed since then to loop most of the downrange mains. For emergency and special situation uses, there are two 10" wells, with various pumps, chlorination systems and a 500,000-gallon water storage tank.

5.3.2.1. Water Distribution System. The water distribution consists of 90,000 linear feet of eight (8) inch to fourteen (14) inch water mains, 25,400 linear feet of 2- 1/2" to six (6) inch service connections, and approximately 1,750 linear feet of service piping of various sizes. The location, type and quantity of valves, fire hydrants and other associated equipment are contained in the General Water Map TE-3.

5.3.2.2. Drawings. The water system overview drawings are contained in TE-3. Specific and detailed drawings are located in the Public Works Building, building 4 at MOTSU.

5.3.2.3. Division and System Maintenance Responsibility. Immediately prior to or during this contract period, MOTSU will be switching to a private potable water utility company for maintenance and repair of the existing potable water distribution system. The point of demarcation will be at the individual building water meter (if one is present) or at a point five (5) feet from where the water line enters the individual building. The potable water distribution system prior to these points shall be removed from this facility maintenance contract and a cost reduction will be accomplished once the private potable water utility company acquires a contract. The facility maintenance contractor shall break out (by line items) the costs for all potable water functions, so a pro-rate reduction can be accomplished when the utility company starts performing the tasks.

5.3.3. Level I, Preventative Maintenance (PM) Tasks and Standards.

5.3.3.1. Ship Provisioning. The Contractor shall be available twenty-four (24) hours per day, seven (7) days per week to provide fresh water to meet ship requirements. Upon notification by the CO, the Contractor shall connect water hoses, meters to measure water supplies, and back-flow preventers to avoid possible contamination from ship's water supply. The Contractor shall be available (within two (2) hours) after notification for call out during ship water filling operations and be prepared to take appropriate corrective actions in the event of system malfunctions during these operations. When active ship loading is in progress, water hookups will only be made with proper approval of MOTSU Ammunition Surveillance Division through the CO. Upon completion of operations the Contractor shall document the quantity of water delivered and provide the documentation to the CO before 9:00 AM on the following workday. The Contractor shall furnish and supply all necessary hoses. A total of 800 LF of 1.5" fire hose with threaded couplings and any necessary Metric and English fittings needed to connect to ship water supply. Hose shall not have any repair splices. This hose shall only be used for potable water supply to ships, meters (3 each, that measure in gallons), fittings, couplings, backflow preventers (3 each), and miscellaneous materials required for ship water provisioning.

5.3.3.2. Records and Reports. The Contractor shall maintain the following records and logs and submit them to the CO at the time and in the format specified in TE-4. These reports may also be utilized in the HQ RADDS monthly report to show the quantity and cost of potable water used.

5.3.3.2.1. Utilities Inspection and Service Record.

5.3.3.2.2. Facilities Engineering Operating Log, Water-General.

5.3.3.2.3. Water Usage Report.

5.3.3.2.4. DD Form 686 for bacteriological samples. Samples shall be collected monthly. Samples will be picked up by Fort Bragg personnel for analysis and reporting.

5.3.3.2.5. Water Plant Daily Log.

5.3.3.2.6. MT Form 290. The Contractor shall complete MT Form 290 showing the amount of water metered to receiving ships and shall obtain the signature of the Ship's Engineer for the amount metered so that ships may be billed.

5.3.3.2.7. Drawings, Maps and Records Maintenance. System maps, as-built plans "hardcopy Red-Lines", and records shall be kept up-to-date by the Contractor to include: indicating flushing of water mains, accounting for water leaks, adding or modifying any water mains and locating potential cross connections. The contractor shall maintain a complete copy of all changes and shall submit a complete and verified copy of all drawing changes to the CO within five (5) business days following accomplishment of any system change.

5.3.3.3. The Contractor shall exercise all water control valves annually and record the valve, date, and number of turns required to close the valve. The month of the valve exercising shall be approved by the CO. The valves and hydrants are listed in TE-12.

5.3.3.4. The Contractor shall perform maintenance and upkeep on fire hydrants and dead-ends. There are approximately one hundred seventy (170) fire hydrants on MOTSU that shall be flushed twice each year, once in March and once in September. Dead end hydrants shall be flushed weekly. The Contractor shall repaint fire hydrants annually. Hydrant barrels shall be painted of silicone alkyd paint conforming to SSPC Paint 21 of traffic yellow. Tops and nozzle caps shall be painted with reflective type paint, color to be determined by the capacity of each hydrant as determined by the fire department. In addition, approximately nine hundred (900) SF of concrete next to hydrants, hose houses and fire telephones on the wharves shall annually be painted traffic yellow. The hydrants are shown on TE-3 and listed in TE-12. Additionally, all brush, trees or shrubs within a ten (10) foot radius of all fire hydrants shall be removed and the area kept clear of vegetation (other than grass) and clutter.

5.3.4. Level II, Service Order (SO) Tasks and Standards.

5.3.4.1. General. The Contractor shall perform Level II service order work as defined in Section 5.1.1.2. in accordance with standards established in the contract on water distribution.

5.3.4.1.1. Emergency Work. Emergency repair includes broken water mains, joint leaks, broken service lines, or damaged fire hydrants, etc. Disinfecting of existing mains after repair or cutting into shall be performed in accordance with AWWA Standard C601-68.

5.3.4.1.2. Unscheduled Maintenance and Repair Standards. The Contractor shall perform unscheduled maintenance, repair or modification of all items in the distribution systems. The Contractor shall troubleshoot: test: diagnose: disassemble: fabricate or replace sub-elements; repair: reassemble; quality test to ensure proper functioning IAW manufacturers stated outputs: and interpret manuals, blueprints, sketches, schematics and specifications for all work.

5.3.4.1.3. Typical Tasks Performed. Typical unscheduled maintenance, repair and modification tasks performed by the Contractor include excavating; repairing, replacing and modifications to service lines and valves: calibrating, repairing, replacing and installing meters and pressure regulators: repairing, replacing and installing valve boxes and manholes: locating and marking underground line and valve locations: backfilling and compacting; and turf and surface restoration. The Contractor shall not backfill until work has been inspected and approved by the Government.

5.4. SEWAGE PLANTS AND SYSTEMS.

5.4.1. General.

5.4.1.1. The Contractor shall operate, inspect, maintain and repair the wastewater and collection systems in strict accordance with the terms and conditions of the contract. The Contractor shall maintain the sanitary sewer collection and treatment system in an operational condition at all times. The system includes all mains, service lines, lift stations, septic tanks and drain fields. The Contractor's work shall include all system components. Facilities and equipment covered by this Performance Work Statement are described in the General Sanitary Sewer

Maps TE-3 and in TE-15. The Contractor shall be responsible for the proper and continuous operation of the wastewater treatment system twenty-four (24) hours a day, seven (7) days a week.

5.4.1.1.1. Background Information. Sewage Plant and System services shall be provided at MOTSU post-wide including the Family Housing Area as identified in this section and;

TE-1 Performance Requirement Summary,

TE-2 Workload Summary,

TE-3 Maps and Work Area Layouts,

TE-4 Required Reports,

TE-6 Permits and Fees

TE-13 Sewer Plant Equipment,

TE-15 PM Schedule – Sewer and Waste Water Systems,

TE-16 Building Characteristic.

5.4.2. System Overview. The wastewater treatment plants have a combined design capacity of 0.1 million gallons per day (MGD). Treatment is accomplished by thirteen (13) septic tanks, thirteen (13) drain fields, and three (3) treatment lagoons. Wastewater treatment at MOTSU is accomplished through septic tanks and drainage fields. The largest drainage field serves the administration area. Wastewater first passes through a septic tank before entering the drainage field. At the wharves, treatment is accomplished by aerobic lagoons, which are open to air and sunlight. Effluent from the lagoons passes through a tablet-type chlorination contact chamber and a dechlorination chamber before discharge. Treated lagoon effluent disposal is accomplished by surface discharge.

5.4.2.1. Wastewater Collection Systems. The wastewater collection system consists of 25,143 linear feet of three (3) inch to eight (8) inch sanitary sewer lines and ten (10) sewage-pumping stations. There is a sewage collection system from the Administration area buildings. A separate collection system is at each of the three (3) wharves. Eleven (11) buildings dispersed around MOTSU have separate individual septic tank systems.

5.4.2.2. Sewage Lift Stations. Lift pumps are used to send administration area wastewater from the septic tanks to the drain fields. Lift pumps also serve building 12, the Visitor's Center, Ammunition Maintenance Facility, Fire Station Number 2 and the triangle smoker. The truck inspection station; building 139; container re-stuff area: Transfer Areas one (1), two (2), and three (3), container transfer area: and the lumberyard have gravity septic systems without lift pumps. The pumping station at each wharf has two (2) pumps working on an alternating sequence. Each of the pumps is controlled by separate float switches in the lift station wet well. If the wastewater in the well becomes sufficiently deep both pumps are activated.

5.4.2.3. Drawings. The wastewater treatment and General Sanitary Sewer Maps are contained in TE-3. Specific and detailed drawings are located in the Public Works Building, Building 4, at MOTSU.

5.4.3. Level I, Preventative Maintenance (PM) Tasks and Standards.

5.4.3.1. Operations. The Contractor shall utilize Water Pollution Control Federation (WPCF) Manual MOP/11 and TM 5-665 for plant procedures and record keeping. The Contractor shall operate, maintain, and control the collection and treatment of wastewater and the ultimate disposal of the processed water as well as the separated solids, in a manner that is safe and meets all the State of North Carolina and Federal environmental regulations. The wastewater and collection system operations, reporting and scheduled maintenance are performed under this contract. All components in the following systems shall be operated, maintained and repaired by the contractor:

1.) Manholes

2.) Pump Stations
3.) Lift Stations
4.) Gravity Sewers
5.) Force Sewers
6.) All Wastewater Drains
7.) Septic Tanks
8.) Drain Fields
9.) Sewage Lagoons

5.4.3.1.1. Certification of Wastewater Treatment Facility Operators. The Contractor shall provide a properly certified Class II or higher Operator in responsible charge and a certified Class I Back-up Operator. The NC Water Pollution Control System Operators Certification Commission must issue certification.

5.4.3.1.1.1. A certified wastewater plant operator shall be available from 0730 hours to 1600 hours on normal Government workdays. On Government holidays and weekends, required daily operations and maintenance checks may be performed by CO approved operator personnel.

5.4.3.1.2. The Contractor shall respond to changes in the collected wastewaters, recognize potential treatment problems, and institute corrective action when necessary. If minimum effluent standards (i.e., National Pollution Discharge Elimination System (NPDES) permit levels) are not obtained from the three (3) sewage lagoons on MOTSU, the Contractor shall determine the cause and take immediate corrective actions. The CO shall be notified immediately by phone of any failure to meet effluent standards.

5.4.3.1.3. The Contractor shall monitor and maintain septic tanks (see TE-3) to ensure efficient operation. In the event of septic tank overflow, the contractor shall pump waste materials from the system and disposed of IAW Federal, State and local laws. If spillage occurs during the pumping cycle, the Contractor shall clean the area to remove all debris, solids, and waste within one (1) hour of occurrence.

5.4.3.1.4. Wastewater Permit Monitoring. The Contractor shall obtain water samples from the three (3) lagoons and the two (2) monitoring wells to meet the EPA National Pollution Discharge Elimination System (NPDES) permit requirements and the State of North Carolina Regulations for receiving waters. Samples shall be tested at an independent state certified lab. Water sampling shall be in compliance with the NPDES Permit No. N00029122, including monitoring report requirements of State of North Carolina Department of Environment, Health and Natural Resources, Division of Environmental Management. (NOTE: Two (2) monitoring wells exist at the South Lagoon).

5.4.3.1.4.1. Lagoon Sampling. The following is a current list of monitoring requirements for each lagoon per the permit;

CHARACTERISTICS AND FREQUENCY
1.) Influent or Effluent Flow – Weekly,
2.) Effluent Biochemical Oxygen Demand (BOD) - 2/Month,
3.) Effluent Total Suspended Residue - 2/month,
4.) Effluent NH3 as N - Monthly,
5. Effluent Fecal Coliform - 2/Month,
6.) Effluent Total Residual Chlorine - 2/week,
7.) Effluent Temperature – Weekly,
8.) pH - 2/Month Effluent.

All NC state and/or Federal wastewater reports shall be completed and forwarded to the state and/or federal Government as required. The Contractor shall be financially responsible for any fines that may result due to any received notice of violation (NOV) because of late wastewater reports being submitted. The Contractor shall maintain the log/sampling records on file for inspection by the CO. All files shall be turned over to the CO upon the end or termination of the contract.

5.4.3.1.4.2. Ground Water Monitoring. The two (2) monitoring wells at the South lagoon shall be sampled three (3) times per year in March, July, and November. The lab test results shall be forwarded to the State of North Carolina Department of Environment, Health and Natural Resources, Division of Environmental Management on Form GW-59 and provided to the CO three (3) days after they are received by the Contractor. The Contractor shall maintain a complete file on-site and available to the CO for inspection. All files shall be turned over to the CO upon the end or termination of the contract. The samples shall be analyzed for the following parameters;

1.) Nitrate (N03), as Nitrogen,
2.) Ammonia (NH3), as Nitrogen,
3.) Chloride (CI),
4.) Total Dissolved Solids (TDS),
5.) Total Organic Carbon (TOC), as Carbon,
6.) pH,
7.) Static Water Level (SWL).

5.4.3.1.5. Storm Water Collection System

5.4.3.1.5.1. Visual Inspection of Storm Water System. Inspections of each outfall and associated system shall occur quarterly. The inspection and any subsequent maintenance activities performed shall be documented, recording date and time of inspection and a narrative description of the facility's storm water control systems, plant equipment and system. Visual monitoring of the system shall be conducted at this time. The following shall be documented: color, odor, clarity, solids (suspended and floating), outfall staining, visible sheens, foaming, and dry weather flow. Two (2) copies of all inspections shall be given to the CO within fifteen days after each inspection.

5.4.3.1.5.2. Outfalls

5.4.3.1.5.2.1. Outfalls requiring visual and analytical monitoring:

SWO01 -- Equip-01 Drainage ditch behind building 30.
SWO02 -- Equip-02 Drainage ditch behind building 9 and next to building 8.
SWO03 -- 36-01 Drainage ditch in front of building 36.
SWO04 -- 14-01 Drainage ditch along tracks next to building 14 and building 43.
SWO05 -- 150-01 Drainage ditch along tracks at Locomotive Refueling Center.

5.4.3.1 5.2.2. Outfalls requiring only visual monitoring:

SWO06 -- Secondary containment system by building 152.
SWO07 -- Secondary containment system by building 153.
SWO08 -- Building 11 (gas station).

5.4.3.1.5.2.3. Analytical Monitoring Requirements. The Contractor shall collect samples at each of the five (5) outfalls two (2) times during the year in a storm event as defined in the permit. One (1) sample shall be taken during the months of April - July, and one (1) sample during August - November. Two (2) copies of all sample results shall be submitted to the CO within fifteen (15) days after the Contractor receives results. Definitions of storm events and grab sample can be found in the permit. The following grab samples shall be collected at outfalls SWO01 - SW005.

5.4.3.1.5.2.3.1. Chemical Oxygen Demand (COD). Total Suspended Solids (TSS), Total Phosphorus, Lead, Cadmium, pH, oil and grease. Lead (total recoverable) (Note 1), and Detergents (MBAS) (Note 2). Also collected shall be total rainfall and event duration.

Note 1 - Total recoverable lead monitoring is required only at outfall SW004.

Note 2 - Detergent monitoring is only required at outfalls SWO01 - SW003.

If sample results are below limits prescribed in the permit, a reduced sampling number may be allowed by the CO.

5.4.3.1.5.2.4. Visual monitoring of outfalls SWO01 - SWO08 during a storm event shall be conducted at a minimum of eight (8) times throughout the year, with six (6) monitoring episodes occurring between the months of April and November. The visual monitoring shall report the following: color, odor, clarity, solids (suspended and floating), foaming, oil sheen, and other obvious indicators of storm water pollution.

5.4.3.1.5.3. Storm and rainwater, which collects inside any secondary containment system shall be monitored and inspected before discharging. The location of secondary containment systems in place, are the fuel tanks located at building 152 (water treatment facility) and building 154 (well house no. two (2)). Secondary containments are required to prevent contaminants, such as oils from entering MOTSU's drainage system.

5.4.3.1.5.3.1. The Contractor shall not be allowed to store hazardous materials where they can be exposed to direct storm or rainwater.
5.4.3.1.6. The Contractor shall flush sanitary sewer manholes and main lines within a three (3) year cycle, of which at least one-third (1/3) shall be accomplished each year. Water for hydraulic cleaning of sewers shall be effluent from the plant, if available. If effluent is not available, the Contractor shall use water from fire hydrants (backflow preventers shall be required) after obtaining approval from the CO.

5.4.3.1.7. Chemical Usage. The only chemicals used in any of the sewage systems are chlorination and dechlorination tablets, which are used to treat the lagoon effluent. The contractor shall keep on hand, one (1) 45 lb. container of chlorination tablets (for use as a concentrated reducing agent for dechlorination) and dechlorination tablets (for use as a concentrated chlorinating and brominating agent and as a bactericide and disinfectant).

NOTE. If the shelf life of the above tablets expires, the Contractor shall dispose of them property (According to the Material Safety Data Sheet) and restock as needed.

5.4.3.1.8. Drawings, Maps and Records Maintenance. System maps, as-built plans “hardcopy Red-Lines“, and records shall be kept up-to-date by the Contractor to include: indicating flushing of water mains, accounting for sewer leaks, adding or modifying any service lines or equipment, handling red, black, and sandy water problems, and locating potential cross connections. The Contractor shall utilize Water Pollution Control Federation (WPCF) Manual MOP/1 1 for record keeping and reporting requirements. Other reporting requirements are detailed in the specific paragraphs of the contract. The contractor shall maintain a complete copy of all changes and shall submit a complete and verified copy of all drawing changes to the CO within five (5) business days following accomplishment of any system change

5.4.3.1.8.1. Form GW-59. Ground Water Monitoring results shall be forwarded to the State of North Carolina Department of Environment, Health and Natural Resources, Division of Environmental Management with a copy provided to the CO within fifteen days after lab results are received by the Contractor.
5.4.3.1.8.2. The Contractor shall comply with MOTSU's Storm water discharge permit. NCS000208. The permit requires visual inspections and analytical sampling. The Contractor shall be responsible for collecting and conducting the analysis for each sample. Two (2) copies of all inspections and sample results shall be given to the CO on a bi-weekly basis. If no inspections or sampling occurred during the reporting period, a negative report shall be submitted.

5.4.3.1.8.3. The Contractor shall obtain and maintain data to meet EPA NPDES permit requirements, and State pollution standards for receiving waters. The Contractor performed water pollution monitoring includes wastewater flow measurements, sampling and analytical analyses and shall be in compliance with the NPDES permit and Standard Methods for the Examination of Water and Wastewater.

5.4.3.1.8.4. Maps, as-built plans, and records shall be kept up to date indicating flushing of mains, accounting for leaks, adding new service dines and locating potential cross connections. (See TE-3).

5.4.3.2. Scheduled Maintenance. The Contractor shall develop preventive maintenance services as identified at TE-15, IAW equipment, and manufacturers’ recommendations. Plant operator maintenance tasks shall be performed in compliance with manufacturers' recommendations for each component. The areas around all equipment shall be clean at all times. Electrical work shall be in compliance with NFPA 70 (National Electrical Code). All components shall be checked daily for proper operation and overheating of electrical drives and bearing housings,

excessive vibrations, and unusual noises. The Contractor shall perform routine preventive maintenance services specified in TM 5-666 and notify the CO if there is a requirement for a Level II service order to replace components or repair items (other than minor repairs and adjustments that are part of operator maintenance), which are not functioning.

5.4.3.2.1. The Contractor shall clean the sewage collection system with a hydro type cleaner and remove sludge from the thirteen septic tanks annually and dispose of the sludge in a State approved site off the terminal.

5.4.3.2.2. The Contractor shall maintain sanitary sewer collection systems and sewage lift stations in an operational condition, which includes all mains, service lines, and lift stations. As a minimum, one (1) pump shall be operational in each station at all times. Any other defective pumps at a lift station shall be repaired by the contractor within two weeks following discovery. The Contractor's work shall include all system components.

5.4.3.2.3. When ship loading or unloading operations are being performed on the wharf(s), the Contractor shall at least daily, activate pumps, perform visual inspections, and repair and/or adjust lift pumps as required.

5.4.3.2.4. The Contractor shall on a monthly basis; open receivers and check ball floats; adjust packing as required; lubricate motors and pumps; make adjustments and minor repairs as required.

5.4.3.2.5. The Contractor shall furnish and maintain in an operational condition all safety equipment such as self-contained breathing apparatus required to perform both scheduled and unscheduled maintenance and repair.

5.4.3.2.6. The Contractor shall annually exercise all main service valves and gate valves in the wastewater system and record the valve, location, date performed, and number of turns required to close the valve and provide a copy to the CO within five (5) working days. As part of this inspection the Contractor shall inspect the stairs, platforms, and handrails that provide access to the sewage lagoon isolation valves and shall provide the CO a listing of all structural deficiencies.

5.4.4. Level II, Service Order (SO) Tasks and Standards.

5.4.4.1. General. The Contractor shall perform Level II service order work as defined in Section 5.1.1.2.

5.4.4.1.1. Emergency Work. The Contractor shall be available twenty-four (24) hours a day seven (7) days per week for emergency work. Emergency repairs shall be performed on broken mains, joint leaks, broken service lines, siphons, lift stations, septic tanks, drain fields, and manholes. The Contractor shall remove, on an emergency basis, any sewage to avoid overflow as a result of broken mains, joint leaks, broken service lines, siphons, lift stations, septic tanks, drain fields, and manholes. Electrical work shall comply with NFPA-70.

5.4.4.2. Unscheduled Maintenance and Repair Standards. The Contractor shall perform unscheduled maintenance, repair, or modification to all items of wastewater treatment or collection systems. The Contractor shall troubleshoot: test: diagnose; disassemble; fabricate, or replace sub-elements: reassemble: quality test to ensure proper functioning IAW manufacturers stated outputs: and interpret manuals, blueprints, sketches, schematics and specifications for all work.

5.4.4.3. Typical Tasks performed. Typical unscheduled maintenance, repair, and modification tasks performed by the contractor include excavating, repairing, replacing, and modifying sewage lines, pumps, and valves: and correcting malfunctions in the sewer system including, but not limited to, mains, lift stations, drain fields and septic tanks. Basic examples of malfunctions include: stoppages, structural failures, overloading, mechanical failures, Acts of God, and electrical failures.

5.5. BUILDINGS, STRUCTURE, AND INSTALLED EQUIPMENT.

5.5.1. General. The Contractor shall implement a comprehensive PM program for buildings, structures, and installed equipment to insure that assets are maintained by scheduled work, which includes installed equipment and equipment-in-place. The Contractor shall develop, document,

maintain, and follow a standard operating procedure (SOP) for preventive maintenance. This SOP shall be developed along the guidelines found in TM 5-610 and shall be submitted to the CO for review and approval before the contract start date. The Contractor shall generate an annual PM plan, schedule, and check list, following guidelines found in TM 5-610 and submit to the CO as shown on TE-4 for approval. The Contractor shall update the schedule on a monthly basis to reflect changes occurring due to delays in Contractor PM Performance. Assets must be maintained in originally installed condition except in cases where condition was less than original when contract commenced. In cases of the latter, the asset must be maintained in at least the condition found at contract outset. If asset is replaced during the life of this contract, it becomes the responsibility of the Contractor to maintain said asset in its installed condition. The functional areas required under this section are;

1.) Roofing Systems,
2.) Structure Components,
3.) Flooring and Floor Covering,
4.) Interior Painting,
5.) Exterior Painting,
6.) HVAC Systems,
7.) Refrigeration,
8.) Plumbing,
9.) Electrical,
10.) Architectural and Traffic Sign Painting and Fabrication,
11.) Keys and Locks,
12.) Playground Equipment,
13.) Fire Protection and Alarm Systems,
14.) Gasoline /Diesel Dispensing Stations,
15.) Gate and Arrest Systems,
16.) Truck Weigh Station,
17.) Overhead Doors,
18.) Metal Working.
19.) Misc Features; Picnic Areas and Gazeboes
20.) Cranes

5.5.1.1. Background Information. Buildings, Structures and Installed Equipment maintenance services shall be provided on MOTSU post-wide, including the Family Housing Area at Fort Johnston in Southport as identified in this section and the following Technical Exhibits;

TE-1 Performance Requirement Summary,
TE-2 Work Estimates
TE-3 Maps and Work Area Location,
TE-4 Required Reports,
TE-7 Appliances,
TE-16 Building Characteristics,
TE-16a Buildings and Facilities,
TE-17 Fuel Station Equipment,
TE-18 Door Hardware Locks and Deadbolts,

TE-19 Overhead Door Inventory,
TE-22 Irrigation Systems,
TE-25 Signs, General, Traffic and Regulatory,
TE-29 Heating, Air Conditioning, Mechanical and Hydronic Equipment,
TE-30 Ventilation Systems,
TE-31 HVAC Suggested PM Schedule,
TE-32 Storage Tanks and Locations and Leak Detection and Monitoring Systems.

Maintenance, repair and alteration of buildings, structures and facilities shall include, but not be limited to, foundations, walls, doors, windows, attics, roofing, floors, floor coverings, porches, balconies, patios, stairs, fixtures, hardware, exterior and interior painting, glazing, roofing, interior plumbing, interior electric, carpentry, and other equipment affixed and installed as part of the building. Facilities include: fencing, play ground equipment, mailboxes, flag poles, guard and watch towers, grease racks, unattached loading ramps, wash racks (including oil water separators and grit chambers), aboveground and underground storage tanks, training facilities other than buildings, monuments, grandstands and bleachers, elevated garbage racks, laundry equipment, sidewalks, platforms, fire ladders, interior and exterior woodwork trim, building identification signs, cabinets, partitions, ceilings, duct work, radiators, grills, dampers, and other miscellaneous structures.

5.5.1.2. Qualifications/Certifications. No service shall be provided by personnel not certified in the State of North Carolina in the appropriate category being administered. See Section 1.

5.5.1.3. Publications and Directives. All services shall be performed in accordance with applicable National Codes, Department of the Army Regulations, Technical Manuals, Publications and Manufacturer's recommendations, as well as all Federal, State and local laws. (See sections 1. and 6.).

5.5.1.4. Drawings and Graphics. Buildings, facilities, and installed equipment requiring service are listed on Technical Exhibits. Detailed buildings, structures and installed equipment drawings are located in the Public Works Division, Building #4.

5.5.1.5. Motor Vehicles. Motor Vehicles used for building, structures and installed equipment services shall be in compliance with all North Carolina DMV requirements and shall meet all applicable OSHA standards for vehicle mounted service equipment.

5.5.1.6. Buildings, Structures and Installed Equipment Maintenance Hours of Availability and Schedule. The Contractor shall have certified personnel available twenty-four (24) hours per day, seven days per week, including holidays to respond to emergency services. Routine maintenance shall be performed only during regular business hours unless otherwise directed by the CO.

5.5.2. Contractor Furnished and/or Operated Item. Effective and efficient execution of the PM program requires equipment suited to the work, supplies, and proper training of PM workers. The Contractor shall have on site at all times the basic tools for carpentry, plumbing and electrical work sufficient for minor maintenance and repair task.

5.5.2.1. Tools and Equipment Calibration. Tools and equipment requiring calibration shall be maintained in accordance with the manufacturer's written guidelines. Such guidelines shall be maintained on site and made available for review by the CO upon request. Calibration on any tools or equipment requiring such shall be completed prior to beginning any task. If the CO believes tools and/or equipment are malfunctioning, a calibration may be required at no extra cost to the Government.

5.5.2.2. Tools and Equipment Malfunction. All tools and equipment used by the Contractor shall be maintained in such a condition as to be able to perform their intended function without modification, unless such modification is approved by the original tool manufacturer or a manufacturer approved third party. Tools and equipment that malfunction shall be repaired ASAP and in no case shall a tool known to the Contractor to be malfunctioning be used. Malfunctioning tools and equipment whose manufacturer or manufacturer's successor has ceased to exist must be repaired by a shop or mechanic maintaining a certification recognized by the specific industry or trade association in the repair of such tools. Repaired tools shall be tested for proper operation and performance prior to use. Safety of personnel and protection of property must take priority where malfunctions of tools and/or equipment are known.

5.5.2.3. Materials and Supplies. Supplies must be readily available if the work is to be accomplished economically. The Contractor shall have a fifteen-day (15) supply of parts and materials on hand required to perform preventative maintenance under this section. In lieu of maintaining on site inventories, the Contractor may establish written contracts with suppliers to stock parts and materials that will be available upon request within a guaranteed time period. Guaranteed time periods must meet conditions established between the Government and the PM Contractor. Copies of all such supply contracts shall be made available to the CO upon request.

5.5.2.4. Task Management Overview. The Contractor shall provide Buildings, Structures and Installed Equipment Maintenance services to ensure that assets are being maintained by scheduled work and that the number of service orders is at a minimum. The Contractor shall ensure that services are performed in an efficient, safe, and effective manner. These services include maintenance of all installed equipment. All PM problems exceeding the Contractor's responsibility and cost to correct shall be documented on a DPW Work Request (DA form 4283) and submitted to the CO, NLT the close of business, five (5) working days after the problem is identified. When conditions are noted that are a threat to life or installation asset integrity the CO will be notified by telephone or other expeditious means within one (1) hour after the problem is identified.

5.5.2.4.1. Task PM Management System. A PM Management Plan, Schedule Checklist and Reminder Sheet shall be developed for each task under this section using guidance in TM 5-610.

5.5.2.5. Level I, Preventative Maintenance (PM) Services for Buildings, Structures, and Equipment. The PM program scope includes planning and scheduling of daily operations consisting of a level of maintenance designed to reduce the long-term cost of routine operations of the Installation's Buildings, Structures and Installed Equipment. The Contractor shall meet all

PM Buildings, Structures, and Installed Equipment requirements stipulated under this contract IAW an approved PM Management Plan. Service Orders will not be issued for PM work.

5.5.2.6. Level II, Service Order (SO) Services for Buildings, Structures and Installed Equipment. The Contractor shall provide Buildings, Structures and Equipment services on a Service Order basis not only for those asset elements covered by Preventative Maintenance services, but for asset elements not covered by scheduled maintenance. All requirements, standards and controls cited under this contract which are applicable to PM Level l task remains applicable to SO Level ll task unless otherwise stipulated.

5.5.3. Level I, Buildings, Structures and Installed Equipment Preventative Maintenance (PM) Task and Standards.

5.5.3.1. Drawings, Maps, Records and Reports Maintenance. Asset as-built plans, "hardcopy Red-Lines", shall be kept up to date and IAW TM 5-610. The Contractor shall maintain the following records and submit them to the CO at the time and in the format specified in TE-4.

5.5.3.1.1. Building and Roof Inspection Results.

5.5.3.1.2. Building PM Inspection Plan and Schedule.

5.5.3.1.3. Fire Alarm Inspection and Test Results. Additional records/reports may be required to satisfy all requirements of NFPA-72 (National Fire Alarm Code).

5.5.3.1.4. Leak Detection and Monitoring System Inspection Results. Additional records/reports may be required to satisfy all requirements of State and Federal Regulations.

5.5.3.1.5. Controls and Regulators Inspection Report.

5.5.3.1.6. Gasoline and Diesel Fueling Station Dispenser Hoses Inspection Results.

5.5.3.1.7. Electric Gate and Vehicle Arrest System Inspection Results.

5.5.3.1.8. Truck Weigh Station System Inspection Results.
5.5.3.1.9. Dry Valve Sprinkler System Inspection Results.

5.5.3.1.10. Mo-Gas and Diesel Lines/Mains Inspection Results.

5.5.3.1.11. Architectural Inspection Report.

5.5.3.1.12. Overhead Doors Inspection Report.

5.5.3.1.13. CO Notification of Non-Covered Problems.

5.5.3.1.14. Boiler Log Book.

5.5.3.1.15. Notification of Contractor's Inability to bring Boiler on Line.

5.5.3.1.16. Boiler Water Treatment Test Results.

5.5.3.1.17. Boiler Summer Overhaul Schedule.

5.5.3.1.18. Fuel Tank Status and Fuel Consumption Report.

5.5.3.1.19. Boiler and Heat Plant PM Inspection Plan and Schedule.

5.5.3.1.20. Air Conditioning, Refrigeration, and Ventilation PM Inspection Plan and Schedule.

5.5.3.1.21 Crane System Inspection Results

5.5.3.2. Roofing Systems. All roofing systems for facilities shall be inspected, maintained, and repaired IAW AR 420-70, TM 5-617 and the National Roofing Contractors Association (NRCA) "Roofing and Waterproofing Manual". All maintenance and repairs shall be accomplished to ensure that the roofing systems remain as watertight assemblies, that water does not enter the interior of the building or the insulating layer, and that the water drains freely from the roof surface at all times. When roofing conditions are noted that will permit water to enter the interior of the building or insulating layer, the CO will be notified by telephone or other expeditious means within one (1) hour after the problem is identified. Roofing Systems to be maintained and repaired under this contract may include the following system types and components;

a.) Metal Roofs,
b.) Cement Asbestos,
c.) Built-Up Roofs,
d.) Flashings,
e.) Roof Decking,
f.) Parapets and Copings,
g.) Lightning Rods and Grounds,
h.) Roof Vents,
i.) Installed Equipment on Roofs,
j.) Gutters and Downspouts.

5.5.3.2.1. Certification of Roofing Personnel. All Contractor personnel involved in the inspection, analysis, maintenance, and repair of roofing systems must possess written certification, acceptable to the CO, attesting to their competency in implementing the procedures and guidelines stated in AR 420-70, TM 5-617 and the NRCA manual. The acceptable level of competence for inspection will included a formal course of instruction of not less than three (3) days covering their area of responsibility. The acceptable level of competence of personnel involved in maintenance and repair of roofing deficiencies will include a written certification that the individual has been employed as a roofing maintenance and repair person for a period of not less that one (1) year, or will work under the direct supervision of an individual who

possesses the written certification. Certification shall be furnished to the CO for acceptance three (3) working days prior to project start date.

5.5.3.2.2. Roof Inspection, Maintenance, and Repair. The Contractor shall inspect all roofing systems annually during May and June and within 72 hours following major storms regardless of season. An Inspection Report shall be maintained and furnished the CO upon request. Repairs must be completed NLT sixty (60) calendar days after the problem is identified unless discovery shows signs of immediately endangering the integrity of the roofing system. In event of imminent compromise of integrity, repairs shall commence within forty-eight (48) hours. Regardless of roof type, all inspection, maintenance and repair actions shall include all flashing and counter flashing; roof parapets and copings; roof vents; gutters and downspouts and lightning rods and ground systems. Roofing systems shall be inspected, maintained, and repaired according to the following:

a.) Membrane roofing systems shall be formally inspected and evaluated according to TM 5-617. The inspection process shall be a comprehensive visual inspection of the roof surface, and of the roof decking from the underside (this underside inspection may require temporary removal of ceiling tile or a trip into a service space above other types of ceilings) along with a nondestructive roof moisture detection survey, using an infrared (IR) scan or nuclear moisture meter, if the roof contains a layer of insulation.

b.) Pitched Gable Roofs. Asphalt Shingle and Granular Surfaced Asphalt Roll Roofing systems shall be formally inspected and evaluated. The inspection process shall visually inspect the roof from outside and from within the attic space. Attic spaces shall be illuminated with artificial light to enhance inspections. Water stains found on the underside of decking or on roof framing members shall be traced to their source and repairs accomplished upon discovery of opening through roofing material and or decking material. Such repairs shall be made within forty-eight (48) hours of discovery. Repairs shall include replacement of decking and replacement or sistering structural members where such repairs fall within the cost limits of the contract. Damaged shingles shall be replaced ASAP and, weather permitting, in no case later than forty-eight (48) hours. Roll roofing shall be cut in lengths suitable to replace damaged sections and shingle fashion overlays of the same material shall be used to cover seams.

c.) Standing Seam Metal Roof systems. Standing Seam metal roofs shall be visually inspected from the outside and from beneath. Water stains showing on insulation shall be traced to the source and repairs accomplished as in b) above. Damaged panels shall be repaired or replaced as necessary upon discovery (within the contract dollar limits). CO must be notified prior to replacement. When corrosion is discovered, the repair shall include cleaning IAW manufacturer's recommendations and recoating surface to match original color. Small punctures shall be repaired IAW manufacturer's recommendations.

d.) Gutters, Downspouts and Roof Drain. All gutters, downspouts, and roof drains shall be cleaned free of debris semi-annually, once in May and once in December and at other times when blockages are discovered. All gutters, downspouts and roof drains shall be tested immediately following cleaning. A written record of the test results shall be made and filed. The test files shall be made available to the CO on request.

5.5.3.2.3. Safety In Roof Repair. The Contractor shall ensure that all personnel working on roofing and roofing related projects are aware of the inherent dangers involved in climbing and working on elevated, unprotected surfaces and hazards associated with any electrical lines or systems located on or near the roof. All roof work shall be done IAW current OSHA safety procedures. Warning lines and tie offs shall be used on all roof work.

5.5.3.2.4. Roof-Mounted Equipment. The Contractor shall ensure that no equipment will be installed on the roof of any MOTSU building unless it is absolutely necessary and cannot be installed on the ground, or inside the building or structure. Insure that all roof-mounted equipment is installed IAW the NRCA criteria and that a continuous waterproofing seal with the room membrane (shingles, metal panel, etc.) is formed. Prior to placing any new equipment on roofs, the Contractor shall obtain a certification from a NC registered professional engineer as to the adequacy of the roof structure to carry the proposed load. The requirement may be waived in writing by the CO and in such instances, DPW personnel may approve, in writing, installations of roof-mounted equipment

5.5.3.2.5. Acceptable Quality Level (AQL) of Maintenance for Roof Systems. Acceptable Quality Level for roofs is 0% moisture in the insulating area or inside the building entering from any roof. Following scheduled or emergency PM inspections, the Contractor shall submit to the CO a written report of findings and a Prioritized Schedule of Corrective Actions (PSCA). The PSCA will be reviewed by the CO and upon receipt of written approval, (the PSCA may be altered through conference with the CO) the Contractor shall implement the schedule and report periodically on his progress toward completion of the PSCA to the CO. The Contractor and the CO will establish a frequency of PSCA progress reports based on the quantity and complexity of activities on the specific PSCA.

5.5.3.2.5.1. Upon completion of the PSCA, the Contractor shall accept 100% responsibility for 0% moisture intrusion as described above for a period of not less than one hundred twenty (120) calendar days from the date on which the PSCA was declared in writing to be complete. If there is a roofing system failure within the one hundred twenty (120) day period, the Contractor shall make repairs at no expense to the government, unless cause for the failure can be shown to be outside normal and expected conditions.

5.5.3.3. Structure Components. In the inspection, installation, maintenance and repair to assets, the Contractor shall follow AR 420-70, TM 5-615, TM 5-618, TM 5-620, TM 5-621 and all applicable guidelines relating to each task. Structure components include;

a.) Foundations and Exterior Walls,
b.) Interior Walls and Ceilings,
c.) Chimneys and Stacks,
d.) Porches and Decks,
e.) Structural Elements,
f.) Loading Ramps and Platforms,
g.) Exterior and Interior Stairs,
h.) Sub-floors,
i.) Window,
j.) Glazing,

k.) Thermal and Moisture Protection.

5.5.3.3.1. Certification/Experience of Structure Personnel. The Contractor personnel involved in the inspection, analysis, maintenance and repair of structure components; must possess a current North Carolina Building Inspector's License or one of the following:

5.5.3.3.1.1. Carpentry.

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A diploma from an accredited trade school or community college.

c.) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the practice of the carpentry trade during the past five years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.3.1.2. Masonry.

a.) Same as (1) above, but for brick and concrete masonry.

5.5.3.3.2. Structure Component Inspection, Maintenance and Repair. The Contractor shall inspect semi-annually structure components of all buildings and facilities. All maintenance and repairs shall be made NLT 60 days after the problem is identified. An Inspection Report shall be maintained and furnished the CO upon request. The Contractor shall ensure that all structure components are inspected, maintained, and repaired according to the following AQL:

5.5.3.3.3. Acceptable Quality Level (AQL) of PM for Structure Components.

5.5.3.3.3.1. Following scheduled or emergency PM inspections, the Contractor shall submit to the CO a written report of findings and a Prioritized Schedule of Corrective Actions (PSCA). The PSCA will be reviewed by the CO and upon receipt of written approval, (the PSCA may be altered through conference with the CO) the Contractor shall implement the schedule and report periodically on his progress toward completion of the PSCA to the CO. The Contractor and the CO will establish a frequency of PSCA progress reports based on the quantity and complexity of activities on the specific PSCA.

5.5.3.3.3.2. Upon completion of the PSCA, the Contractor shall accept 100% responsibility for the integrity of the structure component which received corrective action as described above for a period of not less than one year from the date on which the PSCA was declared in writing to be complete. If there is a structure component failure within the one-year period, the Contractor shall make repairs at no expense to the government, unless cause for the failure can be shown to be outside normal and expected conditions

5.5.3.4. Flooring and Floor Covering. In the installation, maintenance and repair of floor covering, the Contractor shall follow generally accepted trade practices recognized by industry related trade associations or written instructions from the floor-covering manufacturer.

5.5.3.4.1. Certification/Experience of Flooring Personnel. All Contractor personnel involved in the inspection, analysis maintenance, and repair of flooring and floor covering must possess a North Carolina Building Inspector's License or one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the practice of the flooring and floor covering trade during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.4.2. Inspection, Maintenance, and Repair of Floors and Floor Covering. The Contractor shall inspect annually flooring and floor covering of all buildings and facilities. All maintenance and repair shall be made NLT sixty- (60) days after a problem has been identified. An Inspection Report will be maintained and furnished the CO upon request. The Contractor shall ensure that all flooring and floor coverings are inspected, maintained, and repaired according to the following AQL.

5.5.3.4.3. Acceptable Quality Level (AQL) of Maintenance for Flooring and Floor Covering:

5.5.3.4.3.1. Following scheduled or emergency PM inspections, the Contractor shall submit to the CO a written report of findings and a Prioritized Schedule of Corrective Actions (PSCA). The PSCA will be reviewed by the CO and upon receipt of written approval, (the PSCA may be altered through conference with the CO) the Contractor shall implement the schedule and report periodically on his progress toward completion of the PSCA to the CO. The Contractor and the CO will establish a frequency of PSCA progress reports based on the quantity and complexity of activities on the specific PSCA.

5.5.3.4.3.2. Upon completion of the PSCA, the Contractor shall accept 100% responsibility for the integrity of flooring or floor covering which received corrective action as described above for a period of not less than 120 calendar days from the date on which the PSCA was declared in writing to be complete. If there is a flooring or floor covering failure within the one hundred twenty (120) day period, the Contractor shall make repairs at no expense to the government, unless cause for the failure can be shown to be outside normal and expected conditions. The following classifications of floors and floor coverings are found on MOTSU and Fort Johnston:

a.) Wood Flooring,
b.) Concrete,
c.) Vinyl Asbestos Tile,
d.) Asphalt Tile,
e.) Resilient Floor Covering,
f.) Carpet and Rugs.

5.5.3.5. Interior Painting. In the maintenance and repair of painted surfaces, the Contractor shall prepare and paint interior surfaces IAW TM 5-618 and all other applicable governing directives. Paints containing lead will not be used. The Contractor shall perform painting services conforming to the MOTSU Architectural Standard paint chart. Copies of the standard may be obtained from MOTSU Public Works Division. Work will be performed on a variety of surfaces where both appearance and surface texture and protection are important. Generally, interior painting includes walls, ceilings, trim, floors, piping, conduits, ducts, built-in assets such as cabinets and hoods, closets, and closet shelves, doors, and columns. The Contractor shall accomplish color-coding and directional markings of pipes and conduits, various safety markings on floors and walls and similar tasks. The Contractor shall not paint over manufacturer's data plates or other items such as outlet covers (unless previously painted), hardware and windows. Annual painting responsibilities will be 500 sq. ft. or less.

5.5.3.5.1. Property Protection and Functionality. The Contractor shall move, reset in original location and protect furniture, equipment, and all Government or personally owned property during the work performance for both empty and occupied buildings. Windows, which do not operate freely as a result of painting, shall be made operational within five (5) days of job completion.

5.5.3.5.2. Work Site Cleanliness. The Contractor shall clean up work sites, during and after work assignments and remove all unused material or refuse from the worksite. Refuse and debris shall be removed from the worksite at the end of each workday and deposited at designated refuse points.

5.5.3.5.3. Color Samples. The Contractor shall furnish samples of all paint colors that conform to TM-5-807-7 and MOTSU Architectural Standards to the CO for approval.

5.5.3.5.4. Certification/Experience of Interior Painting Personnel. All Contractor personnel involved in the inspection, analysis maintenance, and repair of interior painting must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the practice of interior painting during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.5.5. Interior Paint Inspection, Maintenance, and Repair. The Contractor shall annually inspect all interior painted surfaces of all buildings and structures. All interior painting maintenance and repair shall be completed NLT sixty- (60) days after problems have been identified. An Inspection Report shall be maintained and furnished the CO upon request. The Contractor shall ensure that all Interior Painted surfaces are inspected, maintained, and repaired according to applicable industry guidelines, and to the following criteria.

5.5.3.5.5.1. Paint Repairs. Paint repairs shall be made to correct the following conditions of interior painted surfaces;

a.) Scuffs,
b.) Abrasions,
c.) Deterioration,
d.) Absence of Paint on previously painted surfaces,
e.) Efflorescence.

The Contractor shall prepare all surfaces prior to painting in accordance with industry-accepted standards. Paint used for touchup and repair shall blend with the color and texture of the immediate adjacent area. To ensure proper blending of colors, the Contractor shall extract samples from the painted surfaces needing repair and have a computer color match done by a commercial paint supplier.

5.5.3.5.6. Acceptable Quality Level (AQL) of PM for Interior Painting. Following scheduled or emergency PM inspections, the Contractor shall submit to the CO a written report of findings and a Prioritized Schedule of Corrective Actions (PSCA). The PSCA will be reviewed by the CO and upon receipt of written approval, (the PSCA may be altered through conference with the CO) the Contractor shall implement the schedule and report periodically on his progress toward completion of the PSCA to the CO. The Contractor and the CO will establish a frequency of PSCA progress reports based on the quantity and complexity of activities on the specific PSCA.
5.5.3.5.6.1. Upon completion of the PSCA, the Contractor shall accept 100% responsibility for the condition of the newly repaired surface for a period of not less than one hundred twenty (120) calendar days from the date on which the PSCA was declared in writing to be complete. If there is a surface failure within the one hundred twenty (120) day period, the Contractor shall make repairs at no expense to the government, unless cause for the failure can be shown to be outside normal and expected conditions.

5.5.3.6. Exterior Painting. Paint is properly applied to all exterior surfaces to protect and seal the substrate first and foremost. Aesthetics is secondary and should be deemed as such in determining maintenance and repair needs under this section of the contract. In the maintenance, and repair of painted surfaces, the Contractor shall prepare and paint exterior surfaces IAW TM 5-618 and all other applicable governing directives. Paints containing lead will not be used. The Contractor shall perform painting services conforming to the MOTSU Architectural Standard paint chart. Copies of the standard may be obtained from MOTSU Public Works Division. Generally, exterior paint includes walls, doors, windows, porches, eaves, sidings, trims, fences, and storage structures. However, stacks, vents chimneys, stairs, fire ladders and escapes, curbs, bridges, bridge abutments, guard rails, posts, manhole covers, fences, benches, boat piers, playground equipment, tennis courts, traffic control devices, cross walks, parking lot lines fire hydrants, bus stops, handicap ramps, electric substations tanks and other outdoor facilities are also required. Annual Exterior painting responsibilities will be 1000 sq. ft. or less.

5.5.3.6.1. Property Protection and Functionality. The Contractor shall move, reset in original location and protect outdoor furniture, equipment, vegetation and shrubbery, and all Government or personally owned property during the work performance for both empty and occupied

buildings. Vegetation and shrubbery shall be trimmed so as not to interfere with required surface restoration. Windows, which do not operate freely as a result of painting, shall be made operational within five (5) days of job completion.

5.5.3.6.2. Work Site Cleanliness. The Contractor shall clean up work sites, during and after work assignments and remove all unused material or refuse from the worksite. Refuse and debris shall be removed from the work site at the end of each workday and deposited at designated refuse points.
5.5.3.6.3. Color Samples. The Contractor shall furnish samples of all paint colors that conform to TM-5-807-7 and MOTSU Architectural Standard to the CO for approval.

5.5.3.6.4. Certification/Experience of Exterior paint Personnel. All Contractor personnel involved in the inspection, analysis maintenance, and repair of exterior painting must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the practice of Exterior Painting during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.6.5. Exterior Paint Inspection, Maintenance and Repair: The Contractor shall inspect all exterior painted surfaces annually on buildings, structures and equipment. All exterior painting maintenance and repair must be completed NLT 60 days after the problems have been identified. An Inspection Report shall be maintained and furnished the CO upon request. Painting shall be inspected, maintained, and repaired according to applicable guidelines and the following criteria:

5.5.3.6.5.1. Exterior Painted Surface Repairs. Paint repairs shall be made to correct the following exterior painted surface conditions:

a.) Abrasions,
b.) Absence of paint on previously painted surfaces,
c.) Blistering or loss of bond to substrate,
d.) Cracking, flaking and pealing,
e.) Efflorescence,
f.) Excessive Chalking and Mildew,
g.) Missing and/or loose caulk,
h.) Rust and Corrosion.

5.5.3.6.6. Acceptable Quality Level (AQL) of PM for Exterior Painting. Following scheduled or emergency PM inspections, the Contractor shall submit to the CO a written report of findings and a Prioritized Schedule of Corrective Actions (PSCA). The PSCA will be reviewed by the CO and upon receipt of written approval, (the PSCA may be altered through conference with the CO) the Contractor shall implement the schedule and report periodically on his progress toward

completion of the PSCA to the CO. The Contractor and the CO will establish a frequency of PSCA progress reports based on the quantity and complexity of activities of the specific PSCA.

5.5.3.6.6.1. Upon completion of the PSCA, the Contractor shall accept 100% responsibility for the condition of the newly repaired surface for a period of not less than 120 calendar days from the date on which the PSCA was declared in writing to be complete. If there is a surface failure within the 120-day period, the Contractor shall make repairs at no expense to the government, unless cause for the failure can be shown to be outside normal and expected conditions.

5.5.3.7. Heating, Ventilation and Air Conditioning (HVAC) Systems. The term HVAC System as used in this document means any installed equipment designed for the sole purpose of conditioning the air in an occupied space. It may be for heating, cooling or both. The Contractor shall operate, maintain, and repair, IAW manufacturer's instructions, all HVAC systems used in administrative, operational, maintenance and residential facilities, identified in Technical Exhibits 29, 30 and 31.

5.5.3.7.1. Certification/Experience of HVAC Personnel. All Contractor personnel involved in the inspection, analysis, maintenance, and repair of HVAC Systems must possessone of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the practice of HVAC System Maintenance during the past (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.7.2. Inspection, Maintenance and Repair of HVAC Systems. The Contractor shall inspect all HVAC systems annually. System maintenance and repair shall be accomplished NLT sixty-(60) days after problems have been identified. An Inspection Report shall be maintained and furnished to the CO upon request. Systems shall be inspected, maintained and repaired according to applicable guidelines and the following additional criteria:

5.5.3.7.2.1. Heating Systems.

5.5.3.7.2.1.1. Oil Fired Hydronic (Hot Water Boiler) System. Hydronic system checks include hot water temperature, circulating water temperature, operation of automatic controls, water level in hot water tanks, and operation of circulating water pumps. Pressure checks are to be performed as well as other operator level maintenance recommended by the system manufacturer's O&M manuals. Copies of manuals and manufacturer's recommended spare parts for all systems are to be kept by the Contractor or be readily accessible at a local dealership. The systems to be checked are identified in Technical Exhibit 29.

5.5.3.7.2.1.1.1. Hydronic (Hot Water Boiler) Systems Water Treatment. All Systems' waters shall be chemically treated to control corrosion from hardness, oxygen and scale build-up so that

maximum heat transfer and system efficiency is maintained. Tests are outlined in TM 5-650. Regardless of the normal weekly testing or periodic sampling schedule, systems requiring treatment, which are, at any time, found to be deficient, shall be sampled, analyzed, and subsequently treated daily until the water conditions are within acceptable limits.

5.5.3.7.2.1.1.2. Hydronic (Hot Water Boiler) Systems Preventive Maintenance Inspection. Preventive maintenance and inspection shall be performed on each system during the heating season IAW Technical Exhibit 31 and manufacturers' installation and operating instructions.

5.5.3.7.2.1.1.3. Hydronic (Hot Water Boiler) Systems Summer Overhaul. The Contractor shall perform an overhaul of each system and associated equipment such as valves, traps, and pumps during the summer (non-heating) season. Items of work, which cannot normally be accomplished when the system is in operation, shall be completed during this period. The time and duration of the shutdowns shall be scheduled to provide a minimum of disruption to normal installation functions. Hydronic Systems inspection and overhaul shall include the following;

a.) Cleaning of flues, and stack bases;
b.) Packing and repairing pumps;
c.) Disassembling and repairing water feed systems pump controls, gauge lines, and siphons;
d.) Cleaning and checking limit controls;
e.) Removing, cleaning adjusting, and replacing burners and nozzles;
f.) Cleaning and changing fuel filters;
g.) Refilling the systems with properly treated water;
h.) Testing the operation of the overhauled systems;
i.) Performing other related tasks as recommended by the systems' manufacturer.

5.5.3.7.2.1.2. Other Heating Systems: The Contractor shall perform PM on other installed heating systems equipment such as unit heaters, fan coil units, and electric heat strips. As a minimum, the equipment PM and checks shall include: changing filters, cleaning burners, checking operation of safety shut-off controls, calibrating thermostats, lubricating moving parts, and cleaning of equipment assemblies and housings. In addition, the area around the heating equipment such as a mechanical room shall be cleaned.

5.5.3.7.2.1.2.1. Electric Air-to-Air Heat Pumps:

5.5.3.7.2.1.2.2. Electric Infrared Heaters:

5.5.3.7.2.1.2.3. Propane Fired Infrared Heaters:

5.5.3.7.2.1.3. Distribution Systems: The Contractor shall maintain and repair all fuel and hydronic fluid lines, condensate lines and duct systems as well as all system accessories (e.g., valves, traps and filters). Included in this maintenance will be an sterilization of duct work in all buildings with cooling systems. This work will begin in the initial contract year and be accomplished every two years there after, unless otherwise designated by the CO. The Contractor shall maintain all mechanical and electrical components of the distribution systems.

5.5.3.7.2.1.3.1. Air Handlers and Hot Air Blowers.

5.5.3.7.2.1.3.2. Air Ducts.

5.5.3.7.2.1.3.3. Piping.

5.5.3.7.2.1.3.4. Hot Water Heaters.

5.5.3.7.2.1.3.5. Thermostats and Controls.

5.5.3.7.2.1.3.6. Ventilating Fans.
5.5.3.7.2.1.4. The Contractor shall perform maintenance and upkeep on the backflow devices identified in TE-12. The Contractor shall perform annual testing and record by a NC certified tester for the eight (8) backflow devices identified. Test reports shall be submitted annually within two days of completion of each test to PW-Environmental. CO shall be notified within one week prior to beginning of the annual tests. Locations of the Backflow devices are listed in TE-12.

5.5.3.7.2.1.5 Fuel Deliveries, Storage and Accountability. The Government, upon Contractor's request, will furnish all fuel for the heating systems, which use fuel oil and gas. The Contractor shall be responsible for informing the CO, in writing, when to order fuel based on past usage records, future projections, and ability to receive and store fuel. No tank shall be allowed to fall below 20 percent of capacity. Fuel is delivered in a minimum of 50 gallons. The Contractor shall provide one (1) person to receive fuel. A listing of fuel storage tanks and capacities is identified in Technical Exhibit 32. Regulations covering operation and monitoring of underground storage tanks as mandated by EPA and the State of North Carolina shall be complied with.

5.5.3.7.2.2. Cooling Systems. The Contractor shall inspect, operate, maintain, and repair all systems used in the production of comfort cooling identified in Technical Exhibits IAW manufacturers' instructions.

5.5.3.7.2.2.1. Inspection, Maintenance and Repair of Air Conditioning (Cooling) Systems. The air conditioning (Cooling) systems include: Packaged Direct Expansion units, Chilled Water/Fan Coil units, and Air-to-Air Heat Pump units, (packaged and split). There is one roof mounted Packaged Direct Expansion unit; fewer than a dozen (12) through wall packaged heat pump units and one (1) Chilled Water/Fan Coil system which shares its coils with a seasonal Hydronic heating system. The remaining units are split heat pumps with outside ground-mounted condensers and evaporative units either attic mounted or floor mounted in mechanical rooms. As a minimum to ensure proper operation during the cooling season, the Contractor shall, during the annual inspection of all A/C systems:
5.5.3.7.2.2.1.1. Inspect condenser coils and clean as necessary,
5.5.3.7.2.2.1.2. Trim overgrown vegetation to a minimum of eighteen (18) inches from unit,
5.5.3.7.2.2.1.3. Check compressor against rated amperage,
5.5.3.7.2.2.1.4. Check refrigerant charge,
5.5.3.7.2.2.1.5. Inspect thermostat for proper calibration,
5.5.3.7.2.2.1.6. Check filters and replace as needed,
5.5.3.7.2.2.1.7. Check condensate pan and drain for blockage,
5.5.3.7.2.2.1.8. Inspect evaporator coil,

5.5.3.7.2.2.1.9. Inspect and tighten electrical connections,
5.5.3.7.2.2.1.10. Lubricate fan motor and all bearings,
5.5.3.7.2.2.1.11. Inspect ductwork for leaks,
5.5.3.7.2.2.1.12. Perform other recommended checks per manufacturers' manual.
5.5.3.7.2.2.1.13. Upon decommissioning of a cooling system the Contractor shall evacuate all refrigerant.

5.5.3.7.2.3. Ventilating Systems. The Contractor shall maintain all ventilating system components, including those integral to HVAC systems. Other ventilating system components that shall be maintained are exhaust fans in rest rooms and equipment maintenance shops and roof ventilators. See Technical Exhibits for types of ventilation systems/equipment to be maintained in the contract.

5.5.3.7.2.3.1 Ventilation Systems PM and Inspections. The Contractor shall perform, according to Technical Exhibits, scheduled periodic inspections. As a minimum the PM shall include the following actions:

5.5.3.7.2.3.1.1. Clean fan blades, fan housing and shutters.

5.5.3.7.2.3.1.2. Lubricate the fan bearings, motors and shutters.

5.5.3.7.2.3.1.3. Tension fan belts properly to prevent slippage.

5.5.3.7.2.3.1.4. Inspect electrical supply cable to fans from receptacles and thermostats. Replace cracked or split insulation with UL approved insulated wire.

5.5.3.7.2.3.1.5. Insure that fan wheel rotates in direction marked on fan housing.

5.5.3.7.2.3.1.6. Check for and remove any obstructions that limit the flow of air into the fan within a distance of one blade diameter of the fan.

5.5.3.7.2.3.1.7. If replacement of fan is necessary, replace according to AMCA (Air Moving and Conditioning Association) standards. Insure that the AMCA seal is displayed on the housing and in the sales literature.

5.5.3.7.2.3.1.8 If replacement of motor is necessary, replace with a totally enclosed motor having sealed bearings.

5.5.3.7.2.3.1.9. Instrument and Control Systems. The Contractor shall inspect maintain, and repair all instrument and control systems. The Contractor shall insure the control systems operate and function in such a manner to maintain the specified cutout of the mechanical system they control, administration and non-critical facilities shall be kept at 78 degrees F during the cooling season and 68 degrees F during the heating season and critical equipment facilities shall be 68 degrees F (plus or minus two (2) degrees) with relative humidity of 50 percent (plus or minus five (5) percent) year round.

5.5.3.7.2.3.1.10. Automatic Temperature Control. The Contractor shall maintain, repair, service, and adjust all pneumatic and electric/electronic controls and accessories in all buildings. Quarterly, the Contractor shall calibrate all pneumatic and electric/electronic controls.

5.5.3.7.2.3.1.11. CriticalEquipment. The three (3) computers and telephone switch rooms in Buildings 18, 25, 17, 26 and 32 are critical equipment facilities. The Contractor shall maintain inside temperatures at 68 degrees F (plus or minus two (2) degrees), with relative humidity of 50 percent (plus or minus five (5) percent) in these critical facilities.

5.5.3.7.2.3.1.12. Seasonal Temperature Setting Requirements. The Contractor shall set thermostats during the month of May to 78 degrees F and re-set thermostats during heating season to 68 degrees F in all facilities except the following:

(1) Bldg. 17 - Fire House and Communications Center

(2) Bldg. 15 - Community Services Center

(3) Bldg. 25 - Dispensary

(4) Bldg. 26 - WIN Site

5.5.3.7.2.3.1.12.1. The setting of thermostats shall be limited to those which cannot be controlled by building occupants.

5.5.3.7.2.3.1.12.2. Medical Exceptions. There may be medical exceptions which would exclude personnel in a family housing unit from the seasonal requirements identified above and may require expeditious response in a heating/air conditioning malfunction. The Government will receive medical statements in April and September and provide the Contractor with a listing of Family Housing units designated as medical exceptions.

5.5.3.7.2.3.1.13. Acceptable Quality Level (AQL) of PM for Heating, Cooling, and Ventilation Systems: Following the system Seasonal Overhaul, the Contractor shall submit to the CO a written report listing the equipment overhauled and a synopsis of work completed on each unit. The report will be reviewed by the CO and upon receipt of written approval; the Contractor shall prepare the overhauled units for the next season's startup. Following seasonal startup, the Contractor shall accept 100% responsibility for the condition of the newly overhauled equipment for a period of one hundred (120) calendar days. If there is a system failure within the one hundred twenty (120) day period, the Contractor shall make repairs at no expense to the government, unless cause for the failure can be shown to be outside normal and expected conditions.

5.5.3.8. Refrigeration Equipment. Refrigeration systems are reach-in type residential, walk-in commercial refrigerators and electric water coolers. Refrigeration equipment will be maintained based on Service Orders received.

5.5.3.8.1. Certification/Experience of Refrigeration Personnel. All Contractor personnel involved in the inspection, analysis maintenance, and repair of Refrigeration Systems must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the practice of Maintenance of Refrigeration Systems during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.9. Plumbing Systems. This work is separate from work included under Water and Sewage Plants and Systems sections of this contract. The Contractor shall maintain plumbing systems and their associated components IAW State and local plumbing codes and applicable TMs and Technical Exhibits. The Contractor's plumbing work shall include the PM of these systems and the repair or replacement of their associated components. The quality of workmanship shall always be equal to, or better than, the minimum specified by the applicable code. The Contractor shall obtain approval from the CO, in writing, prior to any deviation for the specified code requirements.

5.5.3.9.1. Certification of Plumbing Personnel. The Contractor shall employ and maintain the full time employment of at least one (1) Plumbing Trade supervisor who possesses a current North Carolina Plumbers License. The licensed employee shall be responsible for ensuring that all plumbing work done under this contract complies with all Local, State and federal codes and regulations. All other Contractor personnel involved in the inspection, analysis maintenance, and repair of Plumbing Systems must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the plumbing trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the practice of Maintenance of Plumbing Systems during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.9.2. Inspection, Maintenance, and Repair of Plumbing Systems. The Contractor shall inspect all plumbing systems annually. Repairs must be completed NLT sixty- (60) days after the problem has been identified. An Inspection Report shall be maintained and furnished the CO upon request. The Contractor shall notify the CO prior to any scheduled heat or gas maintenance outages or curtailments at least eight (8) hours before desired outage. Systems shall be inspected, maintained, and repaired according to applicable guidelines and the following criteria:

5.5.3.9.2.1. Leaky Joints. Inspect, adjust and repair leaky joints, faucets, and other outlets by replacing washers and tightening screws or fittings.

5.5.3.9.2.2. Water Heaters and Plumbing Fixtures. Inspect, install and repair domestic hot water heaters and plumbing fixtures to include commodes, urinals, kitchen and utility sinks, showers, and bathtubs.

5.5.3.9.2.3. Sluggish/Clogged Drains. Inspect and provide PM for sluggish drainage in sinks, washbasins, tubs and showers, floor drains, urinals, commodes, and other drains.

5.5.3.9.2.4. Sump Pump Pits. Inspect and clean sand and other debris from sump pump pits.

5.5.3.9.3. Gas Lines, Valves and Regulators. Visual inspection of area for natural gas leaks along mains. Inspect propane and natural gas valves, regulators, and gas burning equipment for leaks.

5.5.3.9.3.1. Cathodic Protection Systems. Inspect cathodic protection devices and repair, or replace and clean and lubricate valves or natural gas mains.

5.5.3.9.3.2. Gasoline and Diesel Tank System Inspection and Maintenance. Inspect gasoline and diesel tanks for leaks; keep valves lubricated and vents free of debris. Pump water out of gasoline and diesel tanks. Clean strainers.

5.5.3.9.3.3. Fuel Dispensing Hoses. Inspect and Replace cracked and defective hoses on fuel dispensing pumps.

5.5.3.9.3.4. Fuel Dispensing Systems' Metering Devices. Inspect and calibrate meters on fuel dispensing pumps for accuracy.

5.5.3.9.3.5. Pump and Drain Tanks: Pump or drain water out of fuel tanks. Pump used oil from oil water separators as required. No separator tank may exceed half capacity of used oil storage.

5.5.3.9.3.6 Oil Skimmers: Operate, maintain and service oil skimmers located at Building 31 and 35. Run skimmers every two weeks or whenever required (level of oil in separator is never to be greater than 1 inch.) Collect used oil in container and transfer to used oil tanks located at Building 7 or 43. Operate the oil skimmer for the oil water separator for the vehicle wash rack on an annual basis to remove collected oils. Dispose of used oil either in used oil tanks at building 7 and 43 or through used oil recycler. PW-Environmental shall be notified within one week prior to beginning of maintenance.

5.5.3.9.3.7. Drains and Sanitary Mains at Fort Johnston: Inspect and clean all drains and sanitary mains at Fort Johnson including the main trap and R-drains. The Contractor shall snake through all cleanouts and all mains: flush and clean out the inside and outside the housing unit traps. This work shall be performed on a semi-annual basis (January and July).

5.5.3.9.3.8. Acceptable Quality Level (AQL) of Maintenance for Plumbing Systems. Following scheduled or emergency PM inspections, the Contractor shall submit to the CO a written report of findings and a Prioritized Schedule of Corrective Actions (PSCA). The PSCA will be reviewed by the CO and upon receipt of written approval, (the PSCA may be altered through conference with the CO) the Contractor shall implement the schedule and report periodically on his progress toward completion of the PSCA to the CO. The Contractor and the CO will establish a frequency of PSCA progress reports based on the quantity and complexity of activities of the specific PSCA.

5.5.3.9.3.8.1. Upon completion of the PSCA, the Contractor shall accept 100% responsibility for the integrity of repaired plumbing systems/fixtures or components for a period of not less than 120 calendar days from the date on which the PSCA was declared in writing to be complete. If there is a failure of a repaired system/fixture or component within the 120-day period, the Contractor shall make repairs at no expense to the government, unless cause for the failure can be shown to be outside normal and expected conditions.

5.5.3.10. Electrical.

5.5.3.10.1. Electrical Work. This requirement is separate from the work included in Electric Plant and Systems Section. The Contractor shall perform unscheduled maintenance and repairs on secondary electrical systems, to include: all disconnect devices; aerial and underground cables, wires, raceways, ducts, and conduits; transformers, capacitors and regulators; grounding equipment; switches, receptacles and residential type appliances; fire alarms; intrusion alarms; lighting fixtures, lamps and clocks as well as the parts and accessories necessary to distribute electricity to the requiring equipment. The Contractor shall re-lamp one-fourth (1/4) of all lights on the Terminal and Housing area each year. The re-lamping shall be coordinated such that after four (4) years, the entire Terminal and Housing area shall have new lamps. Only lamps that meet, as a minimum, the "Green Star" energy rating shall be utilized. All electrical work done on MOTSU shall be performed by personnel authorized to engage in electrical contracting within the state of North Carolina and shall hold a North Carolina electrical license. This contract shall require a North Carolina Unlimited Electrical license. An electrical license from another state may be acceptable if it qualifies under North Carolina's reciprocity process. A copy of the unlimited electrical license shall be submitted with the contractors' final bid. If a journeyman electrician actually performs the electrical work and does not possess an acceptable electrical license and is in fact working under someone else's license, then the holder of the unlimited electrical license shall physically inspect and make any required corrections, at the end of each day's work, for all work performed by the unlicensed journeyman. A written record of all such inspections and corrections shall be maintained by the Contractor and shall be submitted to the COR when requested.

5.5.3.10.1.1. Electrical Material and Equipment. Electrical materials and equipment utilized by the Contractor shall comply with existing codes of the National Fire Protection Association (NFPA), Bureau of Standards, and the American Safety Code. All work shall conform to the requirements of the latest editions of the NFPA-70 (National Electrical Code) and the National Electrical Safety Code (NESC). All electrical equipments, devices and replacement parts installed on MOTSU shall be Underwriters Laboratory (UL) listed and labeled. The Contractor's electrical work shall include, but is not limited to:

5.5.3.10.1.1.1. Testing, installing and repairing electrical systems, such as panels, transformers, disconnects, circuit breakers, switchgear, receptacles, wiring, luminaries, control circuits, conduits, motors, relays, starters, lamps, and any other devices that make up a working electrical system.
5.5.3.10.1.1.2. Measuring, cutting, threading, bending, assembling, disassembling and installing conduits: pulling wire, splicing, and connecting wires to electrical devices.

5.5.3.10.1.1.3. Reading and working from blueprints, wiring diagrams and/or sketches. Reading technical manuals.
5.5.3.10.1.1.4. Locate, diagnose and repair troubles occurring in all types of electrical devices.
5.5.3.10.1.1.5. Testing and align electrical circuits and equipment.
5.5.3.10.1.1.6. Installing, maintaining, and repairing a wide variety of electrical fixtures, devices, tools and appliances such as those shown in TE-7.
5.5.3.10.1.1.7. Changing defective light bulbs (lamps); re-lamping fixtures; replacing ballasts, capacitors and lens; removing and hanging lighting fixtures.
5.5.3.10.1.1.8. Inspecting, testing, cleaning, repairing, replacing and adjusting electrical buzzer and bell circuits, light sockets, lighting fixtures, emergency lights and emergency lighting systems, fans, switches, office and heating appliances, clocks, rheostat, thermostats, and electrical drills, saws, grinders, and other shop equipment.
5.5.3.10.1.1.9. Electrical installation, testing and repair of dispensary equipments.
5.5.3.10.1.1.10. Installing, testing, maintaining, and repairing electric motors and controllers, including inspecting, greasing and replacing bearings.
5.5.3.10.1.1.11. Cleaning, oiling, greasing, and painting motors and other rotating machinery, including repairing, rewinding and applying insulating paint to windings.
5.5.3.10.1.1.12. Replacing defective capacitors, cutout switches and brushes.
5.5.3.10.1.1.13. Checking all controls and components associated with motor controls and circuits.
5.5.3.10.1.1.14. Fabricating sleeve bearings, washers, rings, bushings, and other parts related to electric motors; cutting and undercutting motor generator commutators.
5.5.3.10.1.1.15. Maintaining and repairing automatic fire control (combustion) systems, fire alarms and fire alarm devices, and related controls. See requirements for technician in paragraph 5.5.3.14.
5.5.3.10.1.1.16. Calibrating, aligning and testing for electrical defects, repairing and/or replacing parts on electric control equipment which, governs operation of gas and oil fired heating systems. Such equipment and instruments include: electronic controls; burner control systems consisting of photoelectric scanner and programming controls, orifice meters, flow meters, temperature and pressure recorders, indicating pyrometers and accessories, modulating pressure controls, pressure regulators, magnetic starters, pump controls, low water cutoff and alarm systems, and electric radiator valves.
5.5.3.10.1.1.17. Maintaining and repairing electric controls consisting of thermostats, valve operator, damper operators, pressure reducing valves, selector switches, gradual switches, solenoid air valve duct humidistat, chiller controls and pressure switches.
5.5.3.10.1.1.18. Maintain calibration of test equipments IAW industry standards and manufacturer’s recommendations.

5.5.3.10.1.2. Acceptable Quality Level (AQL) for PM and Repair of Electrical Devices and Systems: Upon completion of repairs or replacement, the Contractor shall accept 100% responsibility for the Devices and Systems' integrity for a period of not less than 1 year from the date on which a specific restoration, replacement or new installation was completed. If there is an integrity failure within the 1-year period, the Contractor shall restore or replace the specific device at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.11. Architectural & Traffic Sign Painting and Fabrication. The Contractor shall perform painting and sign fabrication tasks necessary for maintenance, repair, replacement and alterations of interior and exterior signs for buildings, structures, facilities and MOTSU Road Signs. All painting and sign fabrication tasks shall be performed IAW MOTSU Architectural Standards and Local, State and Federal DOT traffic sign directives and regulations.

5.5.3.11.1. Paint Storage. The Contractor shall store paint in sealed containers that plainly show the brand name, formula, and specification number which shall be legible at time of use. The Contractor shall not order paint in containers larger than five (5) gallons. The Contractor shall ensure all paint conforms to TM 5-618. The use of paint containing more than 0.5 percent lead by weight in the total non volatile content of the paint is strictly prohibited for painting any surface covered by this section of the contract. Paint used in housing units shall be lead free. Upon request from the Contracting Officer, the Contractor shall furnish a supplier's record of batch production data and test results for each batch, except that batch production data may be limited to calculated lot composition and test results may be limited to weight per gallon, viscosity, fineness of grind, drying time, color, and gloss. When the required quantity of material of a particular color is five (5) gallons or less, a proprietary brand of material similar to that specified may be proposed, and the production data and test results specified above may be waived. All paint materials are subject to the approval of the CO.

5.5.3.11.2. Paint Application. The Contractor shall apply paint by brush, roller, or airless spray. The Contractor shall not apply paint by conventional spray unless approved by the CO. All paint shall be applied IAW manufacturer's recommendations. Paint shall be applied in sufficient thickness to completely cover the previous coat or surface. Surfaces being painted shall be sharp and clean where they adjoin other surfaces, without overlapping.

5.5.3.11.3. Color Samples. The Contractor shall furnish samples of all paint colors that conform to TM 5-807-7 to the CO for approval.

5.5.3.11.4. Certification/Experience of Sign Painting Personnel. All Contractor personnel involved in the inspection, maintenance, repair, painting and replacement of signs must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the contractor employee has worked in the practice of Sign Painting and Maintenance during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.11.5. Architectural and Traffic Sign Inspection, Maintenance, Repair and Installation. The Contractor shall inspect annually architectural and traffic signs for visual clarity and legibility. All vegetation that restricts the intended visibility of any sign shall be trimmed or removed. Faded and illegible signs shall be repainted or refinished using materials matching the existing sign lettering and background. Materials used in the replacement and restoration of signs shall

match or exceed existing material in thickness and durability. Exterior signs must be of materials designed for outdoor exposure. Traffic signs shall be maintained, colored, sized and fabricated IAW local, State and Federal guidelines and regulations and the most current Manual of Uniform Traffic Control Devices for Streets and Highways published by AASHTO. Lettering on all signs shall be sized for reading at distances appropriate for the signs intended purpose. See TE-16a and TE-25.

5.5.3.11.5.1. New Signs: On occasion as directed by the CO to fabricate and install new signs (signs which have not been posted prior and for purposes that may be new) the Contractor shall follow the State and Federal guidelines and regulation and the most current Manual of Uniform Traffic Control Devises for Streets and Highways published by AASHTO for the media, methods, design, layout and size. The Contractor shall fabricate and install approximately 25 new traffic and information signs annually IAW the most current Manual of Uniform Traffic Control Devises for Streets and Highways published by AASHTO.

5.5.3.11.5.1.1. Missing Signs: The contractor shall replace missing signs in kind. In event signs are missing as the result of a natural disaster, the Contractor shall replace them as directed by the CO.

5.5.3.11.5.1.2. Posting: The Contractor shall ensure that all signs are posted Plumb, Square and Level unless there is special reason (to attract attention or for artistic effect) to tilt, cant or twist the posting.

5.5.3.11.5.2. Acceptable Quality Level of Architectural and Traffic Sign Maintenance and Repair. Upon completion of sign restoration, replacement or new installation, the Contractor shall accept 100% responsibility for the signs' integrity for a period of not less than one (1) year from the date on which a specific restoration, replacement or new installation was completed. If there is an integrity failure within the 1-year period, the contractor shall restore or replace the specific sign at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.12. Keys and Locks. The Contractor shall install, repair, maintain, adjust or replace electrical, mechanical, and combination locks, latches, panic devices, door closers, keys, and strikes of difference makes, sizes and shapes. These may be installed in buildings or building components. The Contractor's work shall include setting and changing lock combinations, recovering locks, making keys (upon approval of the CO) and fabricating minor parts from raw stock.

5.5.3.12.1. The Contractor shall provide locksmith service and perform repair, replacement, modification and conversion of all types of locks and locking type security devices, including Family Housing locking devices. The Installation is currently utilizing **BEST** Key Core locking system.

5.5.3.12.2. The Contractor shall provide a key-cutting service, for up to two hundred (200) keys annually, in compliance with key control regulations AR 190-11, and AR 190-47. The Contractor shall duplicate keys and cut keys by code. The Contractor shall provide re-keying and mastering of lock systems for up to thirty- (30) cores annually. Mastering shall mean the

capability to develop and execute original mastered systems in addition to expanding existing systems. The Contractor shall pick, decode, recode, manipulate, remove, diagnose problems, repair or replace and install locks.

5.5.3.12.3. The Contractor shall remove, repair, replace and install security items including high security hinges and hasps, padlocks, rim locks, cylinder locks, strike latch sets, privacy sets, electric locking devices, mortise entrance door lock sets, horizontal locks, double lock security lock sets, narrow door stile dead bolts, tubular locks, dead bolts, sliding door locks, mail box locks, partition gate locks, rim dead bolt locks, push button combination locks, security screens, security bars, and panic hardware.

5.5.3.12.4. The Contractor shall maintain, repair, and replace electronic entry systems.

5.5.3.12.5. The Contractor shall provide professional entry services to authorized tenant key control officers when directed by the Contracting Officer.

5.5.3.12.6. Certification/Experience of Key and Lock Personnel. All personnel involved in the inspection, analysis, maintenance, repair and replacement of Keys and Locks must have 6 months documented work history.

5.5.3.12.7. Key and Lock Inspection, Maintenance, and Repair. The Contractor shall inspect all lock systems annually. An Inspection Report shall be maintained and furnished to the CO quarterly. Repairs must be completed NLT the end of the business day the problem is identified. Locking systems shall be inspected, maintained and repaired as per manufacturer's instructions, applicable guidance and the following criteria.

5.5.3.12.8. Acceptable Quality Level of Key and Lock Maintenance and Repair. Upon completion of the annual lock system inspection or new installation of a lock system, the contractor shall accept 100% responsibility for the lock or lock system integrity for a period of not less than 1 year from the date on which a specific repair, replacement or new installation was completed. If there is an integrity failure within the 1-year period, the Contractor shall repair or replace the specific lock or lock system at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.13. Playground Equipment Inspection, Maintenance and Repair**.** The Contractor shall inspect playground equipment semi-annually. An Inspection Report shall be maintained and furnished to the CO upon request. Repairs must be completed NLT sixty- (60) days after the problem is identified. Equipment shall be inspected maintained and repaired IAW manufacturers' instructions. The Contractor shall furnish the CO a detailed report of all equipment requiring repair or replacement. In the event the inspection reveals damaged equipment which results in a safety hazard, the equipment shall be isolated by barricades and the Contracting Officer shall be notified immediately. Barricades shall remain in place until repair or replacement of the hazardous equipment is accomplished.

5.5.3.13.1. Certification/Experience of Playground Equipment Personnel. All personnel involved in the inspection, analysis, maintenance, repair and replacement of playground must have one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the contractor employee has worked in the practice of Playground Equipment Maintenance during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.13.2. Acceptable Quality Level of Playground Equipment Maintenance and Repair: Upon completion of the repair or new installation of Playground Equipment, the Contractor shall accept 100% responsibility for the condition of the Equipment for a period of not less than one (1) year from the date on which a specific repair, replacement or new installation was completed. If there is an equipment failure within the one (1) year period, the contractor shall repair or replace the specific piece of Playground Equipment at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.14. Fire Protection and Alarm Systems. All fire protection and alarm system for facilities shall be inspected, maintained and repaired IAW NFPA 72, NFPA-25, Fire Alarm Code and all applicable guidance relating to this task.

5.5.3.14.1. Fire Department Notification and Inspection. The Fire Department shall be notified telephonically before any work is performed on the fire protection and alarm systems. The Fire Department will inspect all work performed on the system and shall be notified telephonically of any revisions in planned work prior to the work being performed. Any system reported inoperative or malfunctioning shall have repairs started immediately and work shall continue until the system is restored to operational service.

5.5.3.14.2. Certification/Experience of Fire Protection and Alarm Personnel. Only personnel who have a minimum of five years experience in the inspection, service and repair of fire alarm systems and possess, as a minimum, a current Fire Alarm Level II certificate from NICET in the sub-field of Fire Protection Engineering Technology (Fire Alarm System) shall be allowed to inspect, maintain and repair this system. If any electrical work is involved, a North Carolina Electrical License shall also be required. The Contractor shall be physically located so as to be able to provide emergency service on-site within four (4) hours after notification. The Contractor shall be available twenty-four (24) hours per day seven days per week. The Fire Department shall be notified prior to performing any work on the fire alarm system.

5.5.3.14.3. Fire Alarm System Quarterly PM and Inspections. The Contractor shall quarterly (Oct., Jan., Apr., and Jul.) or as required by NFPA-72 (National Fire Alarm Code), (the more stringent requirement shall be utilized), inspect, test, calibrate, perform PM and repair defects found on the entire fire alarm system. These tests, inspections and repairs shall include all requirements as stated in the latest NFPA-72, Fire Alarm Code. Any defective devices, panes, conduits, wiring, antennas, batteries, etc, found shall be immediately repaired or replaced and retested. The CO shall be notified immediately of any defective Fire Alarm System. All devices shall be tested. A written record of all inspections shall be retained by the contractor and shall be made available to the CO upon request. All record keeping shall be done IAW the requirements of NFPA-72.

5.5.3.14.4. Sprinkler System Inspection: Semiannually or as required by NFPA-72 and NFPA-25 (Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems), the Contractor shall inspect, test and repair the sprinkler systems in buildings 14, 31, 43, 44 and 204. This work shall include, as a minimum, the sprinkler systems (to include all piping, supports, heads and valves), valve tamper switches, calibration of all gauges, and strip test all wet valves. Weekly the Contractor shall inspect wet valves for proper air pressure, and perform maintenance and repair required to ensure proper and efficient operation of sprinkler system valves. The Contractor shall ensure dry pipe systems and heating elements are operating properly during cold weather to preclude valve freeze up. The Fire Department shall be notified prior to working on any fire systems. All inspections shall be performed by personnel who have a minimum of five years experience in the inspection, service and repair of fire sprinkler systems and possess, as a minimum, a current Fire Alarm Level II certificate from NICET in the sub-field of Fire Protection Engineering Technology. A written record of all inspections shall be retained by the Contractor and shall be made available to the CO upon request. All record keeping shall be done IAW the requirements of NFPA-72 and NFPA-25.

5.5.3.14.5. Acceptable Quality Level of Fire Protection and Alarm Maintenance and Repair. Upon completion of the Fire Protection and Alarm Quarterly inspection or new installation or replacement of an Alarm system, the Contractor shall accept 100% responsibility for the system's integrity for a period of not less than 1 year from the date on which the inspection, repair, replacement or new installation was completed. If there is a system failure within the 1 year period, the Contractor shall repair or replace the specific Fire Protection and Alarm system at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.15. Gas/Diesel Dispensing Stations. Quarterly, the contractor shall inspect the Gasoline/Diesel Dispensing Stations and perform maintenance as required to maintain the safe and efficient operation of these systems. Each inspection must include the use of monitoring equipment to check for leaks along mains, gasoline valves, regulators and other dispensing equipment. As a minimum, the maintenance activities shall include: valve lubrication; cleaning of vents and strainers; replacement of hoses on pumps (if required) and adjustment of mixing temperature control valves. See TE 17 for equipment details on these stations. The inspection, maintenance, and repair to assets shall follow all applicable local, State, and Federal guidelines.

5.5.3.15.1. Certification/Education of Gas/Diesel Dispensing Personnel. The Contractor personnel involved in the inspection, analysis, maintenance, and repair of dispensing components must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the practice of Gas/Diesel Dispensing Station Maintenance during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.15.2. Inspection, Maintenance, and Repair of Dispensing Equipment.

5.5.3.15.2.1. The Contractor shall inspect gasoline and diesel fueling dispenser hoses for proper grounding of hoses once each month and measure resistance to ground (in ohms) for each hose. There are three (3) fueling stations containing a total of eight (8) hoses.

5.5.3.15.2.1.1. Acceptable Quality Level (AQL) of PM for Gas/Diesel Dispensing Station. Upon completion of the inspection or new installation or replacement of the, Gas/Diesel Dispensing Station equipment, the Contractor shall accept 100% responsibility for the system's integrity for a period of not less than 1 year from the date on which the inspection, repair, replacement or new system component installation was completed. If there is a system failure within the 1-year period, the Contractor shall repair or replace system components at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.16. Electric Gate and Vehicle Arrest Systems. The inspection, maintenance, and repair to assets shall follow all manufacturers' instructions and applicable guidelines

5.5.3.16.1. Certification/Experience. The Contractor personnel involved in the inspection, analysis, maintenance, and repair of the gate and arrest systems must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the inspection, analysis, maintenance, and repair of the gate and arrest systems during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.16.2. Inspection, Maintenance, and Repair of Gate and Arrest Systems. The Contractor shall inspect gate and arrest systems annually. An Inspection Report shall be maintained and furnished to the CO upon request. Repairs must be made NLT 60 days after the problem has been identified. Systems shall be inspected, maintained, and repaired according to applicable guidance and the following criteria:

5.5.3.16.3. Acceptable Quality Level (AQL) of Maintenance for Gate and Arrest Systems. Upon completion of the annual inspection or the performance of a system repair or new installation, the contractor shall accept 100% responsibility for the Gate and Arrest system integrity for a period of not less than 1 year from the date on which a specific repair, replacement or new installation was completed. If there is an integrity failure within the 1-year period, the Contractor shall repair or replace the specific Gate and Arrest system at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.17. Truck Weigh Station. The inspection, maintenance, and repair to assets shall follow all manufacturers' instructions and applicable guidelines

5.5.3.17.1. Certification/Experience. The Contractor personnel involved in the inspection, analysis, maintenance, and repair of the truck weight station must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the Contractor employee has worked in the inspection, analysis, maintenance, and repair of stationary truck scales during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources

5.5.3.17.2. Inspection, Maintenance, and Repair Truck Weight Station. The Contractor shall inspect weight station annually. An Inspection Report shall be maintained and furnished to the CO upon request. Repairs must be made NLT 7 calendar days after the problem has been identified. Systems shall be inspected, maintained, and repaired according to applicable guidance and the following criteria:

5.5.3.17.3. Acceptable Quality Level (AQL) of Maintenance for Truck Weight Station. Upon completion of the annual inspection or the performance of a weigh station repair, the contractor shall accept 100% responsibility for the Truck Weight Station's integrity for a period of not less than 1 year from the date on which an inspection or repair was completed. If there is an integrity failure within the 1-year period, the Contractor shall repair the scale at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.18. Overhead Doors. The Contractor shall, annually, inspect and repair all overhead doors shown in Technical Exhibit 19. The doors shall be inspected for proper mechanical/electrical operation, broken gaskets or deteriorated seals. Correct operation of pressure activated cut-off switches on electrical doors shall be verified. Moving parts shall be lubricated as necessary. An Inspection Report shall be maintained and furnished to the CO upon request. Repairs must be made NLT 60 days after the problem has been identified.

5.5.3.18.1. Certification/Experience. The Contractor personnel involved in the inspection, analysis, maintenance, and repair of overhead doors must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

b.) A verifiable list of at least five (5) references from clients for whom the contractor employee has worked in the inspection, maintenance, and repair of Overhead Doors during the past five (5) years. At least one (1) of the five (5) references must be from commercial or government sources.

5.5.3.18.2. Acceptable Quality Level (AQL) of Maintenance for Overhead Doors. Upon completion of the quarterly inspection of all overhead doors, the Contractor shall accept 100% responsibility for the door's integrity for a period of not less than 1 year from the date on which an inspection or repair was completed. If there is an integrity failure within the 1-year period, the Contractor shall repair the door at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.19. Metal/Sheet Metal Working. The Contractor shall maintain the capability to repair, replace or construct metal components of buildings and structures; installed building equipment and construct and install metal components in support of other maintenance activities. Metalworking shall include heating and bending to form metal shapes, drilling, torch cutting, hammer forging, grinding, sawing and fitting of metal parts. The Contractor shall also weld all types of metals using electric, acetylene and/or inert gas shielded welding processes. Welding shall be preformed on light, heavy gauge, and hardened metals using flat, vertical, horizontal, and overhead positions. Processes include preheating, brazing, bead welding, flame cutting pressure welding and heat-treating. Metalworking includes the full range of metalworking and sheet metal activities. The Contractor shall perform all sheet metal and ironwork services, including the following:

1.) Fabricate, install, repair and replace parts and components of buildings, utility systems, roadway structures, drainage structures and metal signs.
2.) Install and repair Venetian blind.
3.) Perform welding services on equipment.
4.) Assemble and install fabricated parts by bolting, riveting, screwing, soldering and spot welding.
5.) Laying out and cutting materials from a variety of stocks.
6.) Form single and double hem edges and seams, dovetail and lock seams, set-in and burred bottom seams, and wired or rolled edges and flanges.
7.) Lay-out and cut materials for any combination of square, rectangular, circular, conical, cylindrical, oval, irregular, and transitional shapes, allowing for seams, joints, laps, and shrinkage.
8.) Shear, bend and form metal parts into desired shapes with hand and power tools and equipment.
9.) Use scribing tools, dividers, rules and other measuring devices.
10.) Use such equipment as shears, brakes, folders, formers, crimping, burring, and bending machines and hand tools.
11.) Repair, modify or fabricate metal items for all types of equipment, including light or intricately made mechanical parts which must fit in assemblies where close tolerances are required.
12.) Plan; lay out, position and stamp work.
13.) Pre-heat metal and maintain heat to prevent distortion.
14.) Repair fuel and water storage tanks.

5.5.3.19.1 Certification of Metal/Sheet Metal Personnel. The Contractor personnel involved in working and fabrication of Metal/Sheet Metal must possess one of the following:

a.) A certificate from a nationally recognized institution, agency or association related to the Sheet Metal trade. The certificate must contain or be accompanied by information that will enable the CO verify its authenticity.

b.) A diploma from an accredited trade school or community college.

c.) A verifiable list of at least 5 references from clients for whom the Contractor employee has worked in the practice of Sheet Metal Mechanic during the past 5 years. At least one of the 5 references must be from a commercial of Government source.

5.5.3.19.2. Acceptable Quality Level (AQL) for Metal/Sheet Metal Work. Upon completion of any Metal/Sheet Metal component installation, repair or replacement, the Contractor shall accept 100% responsibility for the work's integrity for a period of not less than 1 year from the date on which the Metal/Sheet Metal component installation, repair, or replacement was completed. If there is an integrity failure within the 1-year period, the Contractor shall correct the failure at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.3.20 Miscellaneous features such as picnic areas and gazeboes. The Contractor shall inspect these areas on a semi-annual bases. An inspection report shall be maintained and furnished to the CO upon request. Units, picnic areas and gazebos shall be maintained and repaired made as needed. The structure, roofing, picnic tables, doors, screens shall be inspected for operation, effectiveness and repaired to a function as required and safe condition.

5.5.3.20.1 Acceptable Quality Level (AQL) of Picnic areas and Gazebos Maintenance and Repair: Upon completion of the repair or new installation, the contractor shall accept 100% responsibility for the condition of the equipment for a period of not less then one (1) year for the date on which a specific repair, replacement was completed.

5.5.3.21. Cranes and Hoists. The inspection, maintenance, and repair to assets shall follow all manufacturers' instructions and applicable guidelines

5.5.3.21.1. Certification/Experience. The Contractor personnel involved in the inspection, certification, analysis, maintenance, and repair of the two bridge cranes in building 43 and the one bridge crane at building 204 must possess the following:

a.) A certificate from a nationally recognized institution, agency or association related to the trade. The certificate must contain or be accompanied by information that will enable the CO to verify its authenticity.

5.5.3.21.2. Inspection, Maintenance, and Repair Bridge Cranes. The Contractor shall inspect cranes in accordance to the requirements of the Preventive Maintenance of the Operations and Maintenance of the individual cranes. An Inspection Report, including the annual certification shall be maintained and furnished to the CO and an additional inspection and certification report shall be mounted in a clear plastic cased frame near the location of each crane. Repairs must be

made NLT 7 calendar days after the problem has been identified. Systems shall be certified, inspected, maintained, and repaired according to applicable guidance and the following criteria:

5.5.3.21.3. Acceptable Quality Level (AQL) of Maintenance for Truck Weight Station. Upon completion of the inspection and annual certification requirements the performance of a crane repair, the contractor shall accept 100% responsibility for the Crane's integrity for a period of not less than 1 year from the date on which an certification, inspection or repair was completed. If there is an integrity failure within the 1-year period, the Contractor shall repair the cranes at no expense to the government, unless cause for the loss of integrity can be shown to be outside normal and expected conditions.

5.5.4. Level ll, Buildings, Structures, and Equipment Service Order (SO) Task and Standards

5.5.4.1. General. The Contractor shall perform Level II Service Order work as defined in Section 5.1.1.2. In accordance with standards established in the contract on maintenance and repair of buildings and structures

5.5.4.1.1. Emergency Work. Emergency repairs include plumbing or roof leaks, wind damaged roofs, windows or doors, clogged sanitary drains, fire and security alarm malfunctions, electricity interruptions, gas or fuel leaks, clogged fixtures and structural damage caused by storms.

5.5.4.2. Unscheduled Maintenance and Repair Standards. The Contractor shall perform unscheduled maintenance, repair or modification of all elements related to buildings, facilities or structural components or systems. The Contractor shall troubleshoot; test; diagnose; disassemble; fabricate repair or replace elements or sub-elements; repair: reassemble; quality test to ensure proper functioning IAW the manufacturer's installation instructions, standard work practices or national codes (the more stringent requirement shall govern); and interpret manuals, blueprints, sketches, schematics, and specifications for all work. All standards and AQL's in PM tasks apply to SO work

5.5.4.3. Typical Tasks Performed. Typical unscheduled maintenance, repair, and modification tasks performed by the contractor include the following:

5.5.4.3.1. Electrical Work. This requirement is separate from the work included in Electric Plant and Systems Section. The Contractor shall perform unscheduled maintenance and repairs on secondary electrical systems, to include: all disconnect devices; aerial and underground cables, wires, raceways, ducts, and conduits; transformers, capacitors and regulators; grounding equipment; switches, receptacles and residential type appliances; fire alarms; intrusion alarms; lighting fixtures, lamps and clocks as well as the parts and accessories necessary to distribute electricity to the requiring equipment 5.5.4.3.1.1. Electrical Material and Equipment. Electrical materials and equipment utilized by the contractor shall comply with existing codes of the National Fire Protection Association (NFPA), Bureau of Standards, and the American Safety Code. All work shall conform to the requirements of the latest editions of the NFPA-70 (National Electrical Code) and the National Electrical Safety

Code (NESC). All electrical equipments, devices and replacement parts installed on MOTSU shall be Underwriters Laboratory (UL) listed and labeled. The contractor's electrical work shall include, but is not limited to:

5.5.4.3.1.1.1. Testing, installing and repairing electrical systems, such as panels, transformers, disconnects, circuit breakers, switchgear, receptacles, wiring, luminaries, control circuits, conduits, motors, relays, starters, lamps, and any other devices that make up a working electrical system.

5.5.4.3.1.1.2. Measuring, cutting, threading, bending, assembling, dis-assembling and installing conduits: pulling wire, splicing, and connecting wires to electrical devices.

5.5.4.3.1.1.3. Reading and working from blueprints, wiring diagrams and/or sketches. Reading technical manuals.

5.5.4.3.1.1.4. Locate, diagnose and repair troubles occurring in all types of electrical devices.

5.5.4.3.1.1.5. Testing and align electrical circuits and equipment.

5.5.4.3.1.1.6. Installing, maintaining, and repairing a wide variety of electrical fixtures, devices, tools and appliances such as those shown in TE-7.

5.5.4.3.1.1.7. Changing defective light bulbs (lamps); re-lamping fixtures; replacing ballasts, capacitors and lens; removing and hanging lighting fixtures.

5.5.4.3.1.1.8. Inspecting, testing, cleaning, repairing, replacing and adjusting electrical buzzer and bell circuits, light sockets, lighting fixtures, emergency lights and emergency lighting systems, fans, switches, office and heating appliances, clocks, rheostat, thermostats, and electrical drills, saws, grinders, and other shop equipment.

5.5.4.3.1.1.9. Electrical installation, testing and repair of dispensary equipments.

5.5.4.3.1.1.10. Installing, testing, maintaining, and repairing electric motors and controllers, including inspecting, greasing and replacing bearings.

5.5.4.3.1.1.11. Cleaning, oiling, greasing, and painting motors and other rotating machinery, including repairing, rewinding and applying insulating paint to windings.

5.5.4.3.1.1.12. Replacing defective capacitors, cutout switches and brushes.
5.5.4.3.1.1.13. Checking all controls and components associated with motor controls and circuits.

5.5.4.3.1.1.14. Fabricating sleeve bearings, washers, rings, bushings, and other parts related to electric motors; cutting and undercutting motor generator commutators.

5.5.4.3.1.1.15. Maintaining and repairing automatic fire control (combustion) systems, fire alarms and fire alarm devices, and related controls.

5.5.4.3.1.1.16. Calibrating, aligning and testing for electrical defects, repairing and/or replacing parts on electric control equipment, which, governs operation of gas and oil fired heating systems. Such equipment and instruments include: electronic controls; burner control systems consisting of photoelectric scanner and programming controls, orifice meters, flow meters, temperature and pressure recorders, indicating pyrometers and accessories, modulating pressure controls, pressure regulators, magnetic starters, pump controls, low water cutoff and alarm systems, and electric radiator valves.

5.5.4.3.1.1.17. Maintaining and repairing electric controls consisting of thermostats, valve operator, damper operators, pressure reducing valves, selector switches, gradual switches, solenoid air valve duct humidistat, chiller controls and pressure switches.

5.5.4.3.1.1.18. Maintain calibration of test equipments IAW industry standards and manufacturer’s recommendations.

5.5.4.3.2. Plumbing. The Contractor's plumbing work shall include maintaining plumbing systems, and repairing/or replacing their associated components. The Contractor shall maintain plumbing and steam systems and their associated components in accordance with applicable sections of the North Carolina Uniform Plumbing Code (UPC). The quality of workmanship shall always be equal to or better than the minimum specified by the applicable UPC. The Contractor shall obtain approval from the CO, in writing, prior to any deviation from the UPC requirements. The Contractor shall maintain the capability to:

5.5.4.3.2.1. Unstop and repair drain lines when blocked.

5.5.4.3.2.2. Adjust and repair leaky joints, connections, faucets, valves, fire hydrants and other water control devices.

5.5.4.3.2.3. Install and repair plumbing fixtures to include domestic hot water heaters, commodes, urinals, kitchen and utility sinks, showers and bathtubs. Place and connect air, natural or manufactured gas, sewage, and water fixtures and facilities such as hydrants, water lines and mains, water closets, lavatories, showers, sinks, dish washing machines, gas heaters and heater control devices, stoves and air compressor equipment and pneumatic control devices.

5.5.4.3.2.4. Cut or drill holes and openings in walls, ceilings and floors, chases, or slots, and set sleeves, thimbles, or inserts to provide passage and support for pipe and fittings to pass through.

5.5.4.3.2.5. Measure, cut and thread pipe, assemble pipe sections, and hang or lay assemblies in positions.

5.5.4.3.2.6. Lay, join and repair concrete, clay, PVC, copper, iron or any other types of pipe.

5.5.4.3.2.7. Repair or replace interior plumbing waste lines, mixing, ball check, shower waste, overflow valves, water coolers and domestic water heaters.

5.5.4.3.2.8. Replace bolts, pipe hangers, strainers, and drain covers that are damaged or missing.

5.5.4.3.2.9. Reset loose commodes.

5.5.4.3.2.10. Clean sand and other debris from sump pump pits and secondary containment systems.

5.5.4.3.2.11. Perform major repair and overhaul work on all pumps (i.e. disassemble pumps, replace impellers, shafts, bearings, gland seals. etc, as necessary), repair or replace sump pumps (currently there are approximately 30 installed and operating), connect all inter-connecting piping from pumping systems to service lines. Replace check valves, gate valves and pressure gauges. Remove and install entire pumping systems and make necessary modifications to piping systems.

5.5.4.3.2.12. Perform repair and overhaul work on components found in hot water circulating pumps.

5.5.4.3.2.13. Repair gasoline, and diesel storage tank leak detection and monitoring systems and associated components, pumps and dispensing systems: natural gas lines; liquid petroleum storage tanks; gas regulators, meters and valves.

5.5.4.3.2.14. Install, repair, modify and adjust all types of fuel burning appliances and equipment such as water heaters and boilers.

5.5.4.3.2.15. Connect and insect for proper operations, water lines to kitchen and dispensary equipment.

5.5.4.3.2.16. Inspect fuel valves, regulators and fuel burning equipment for leaks. Any leaks found shall be repaired.

5.5.4.3.2.17. Pump or drain water out of fuel tanks. Pump used oil from oil water separators as required. No separator tank may exceed half capacity of used oil storage.
5.5.4.3.2.18. Inspect fuel tanks for leaks, keep valves lubricated and vents free of debris.
5.5.4.3.2.19. Secure and repair low and medium pressure gas distribution lines.

5.5.4.3.2.20. Locate and mark location of underground lines, as required by MOTSU DPW, using electronic pipe locating equipment.

5.5.4.3.2.21. Remove asbestos and dispose of it in accordance with federal, state, and local rules and regulations. Asbestos pipe is only located within the walls of some of the Family Housing units and currently in building 139.

5.5.4.3.2.22. Install, remove, repair and maintain plastic thermo-weld pipe.

5.5.4.3.2.23. Maintain, troubleshoot and repair the electronic sign at the entrance to MOTSU. The Contractor shall also be tasked to daily change the verbiage on this sign. The information to be placed on the sign shall be provided to the Contractor.

5.5.4.3.3. Metal Working. The Contractor shall maintain the capability to repair, replace or construct metal components of buildings and structures, installed building equipment, fire range fixtures, dining facility equipment and kitchen equipment, and shall construct and install metal components in support of other maintenance activities. Metalworking shall include heating and bending to form metal shapes, drilling, torch cutting, hammer forging, grinding, sawing and fitting of metal parts. The Contractor shall also weld all types of metals using electric, acetylene and/or inert gas shielded welding processes. Welding shall be performed on light, heavy gauge, and hardened metals using flat, vertical, horizontal, and overhead positions. Processes include preheating, brazing, bead welding, tack welding, flame cutting, pressure welding, and heat-treating of metals. Metalworking includes the full range of metalworking and sheet metal activities. The Contractor shall perform all sheet metal and ironwork services. Metalworking shall include:
5.5.4.3.3.1. Fabricate, install, repair, and replacement of parts or complete assemblies as required for: metal components of buildings (except door hardware), metal parts of installed building equipment, dining facility equipment. Kitchen equipment, utility systems, roadway structures, drainage structures, metal signs, installing anchorages in floors and walks to secure pilferable items.

5.5.4.3.3.2. Install, Repair and Inspect Venetian Blinds. All Venetian blinds shall be inspected annually for damage and repairs made. The Contractor is subject to SO being issued in response to the Custodial Services Contract observations. If Venetian blinds cannot be repaired, they shall be replaced with a like type blind.

5.5.4.3.3.3. Perform welding services on equipment.

5.5.4.3.3.4. Maintain breech from boilers to stacks.

5.5.4.3.3.5. Assemble and fasten fabricated parts by installing bolts, rivets, screws, and/or seam, solder, and spot welding.

5.5.4.3.3.6. Interpret blueprints, drawings, sketches, and work orders.

5.5.4.3.3.7. Use templates or patterns as guides in laying-out and cutting materials from a variety of stocks.

5.5.4.3.3.8. Form single and double hem edges and seams, dovetail and lock seams, set-in and burred bottom seams, and wired or rolled edges and flanges.

5.5.4.3.3.9. Layout and cut materials for any combination of square, rectangular, circular, conical, cylindrical, oval, irregular, and transitional shapes, allowing for seams, joints, laps, and shrinkage.

5.5.4.3.3.10. Shear, bend and form metal parts into desired shapes with hand and power tools and equipment.

5.5.4.3.3.11. Determine dimensions by application of basic shop mathematics and use of scribing tools, dividers, rules and other measuring devices.

5.5.4.3.3.12. Use such equipment as shears, brakes, folders, formers, crimping, burring, and bending machines, and hand tools.

5.5.4.3.3.13. Repair, modify or fabricate metal items for all types of equipment, including light or intricately made mechanical parts which must fit in assemblies where close tolerances are required.

5.5.4.3.3.14. Plan, layout, position and stamp work.

5.5.4.3.3.15. Preheat metal and maintain heat to prevent distortion.

5.5.4.3.3.16. Use templates, jigs, blueprints, and other guides to repair, modify or fabricate metal items for all types of equipment.

5.5.4.3.3.17. Repair space heaters, low-pressure steam boilers and hot water heaters (electric, oil and gas).

5.5.4.3.3.18. Repair fuel and water storage tanks.

5.5.4.3.4. Painting.

5.5.4.3.4.1. Spot Painting, Interior and Exterior. The Contractor shall perform spot painting services. The annual painting responsibilities will be up to 250 SF per facility. The Contractor shall perform painting services conforming to a CO's approved paint chart. The Contractor furnished paint shall be lead free for all areas of MOTSU and the Housing area. The Contractor shall be required to spot paint interior and exterior walls, windows and door units, water and electrical towers, metal light and lightning poles, transformers and switchgear, guy wire guards, reflectors, kitchen cabinets, and other stationary or mobile equipment. Work shall be performed on a variety of surfaces where both appearance and surface protection are important. The Contractor shall repair and prepare all surfaces prior to painting. The Contractor shall move, reset, and protect furniture and equipment and protect all Government and privately owned property during spot painting operations.

5.5.4.3.4.2. Sign Painting. The Contractor shall determine media, methods, plan, design, layout, size of letters, pictorials, and other features such as suitable coloring, etc, bond sign faces to sign blanks, and paint signs. The Contractor shall design, fabricate, and paint posters, informational signs, directional signs, field training signs, safety signs, and banners. The work shall be laid out in order to produce lettering and art features to scale, print in graduations, numerical designations, explanatory lettering, color coding for safety, and color coding

munitions for training. Details shall be drawn from rough sketches, drawings, photographs, etc, using chalk and paint. The Contractor shall determine the type of paint best suited for the job, mix colors for consistency needed to do the work, perform freehand and gold-leaf lettering. Work shall be on a variety of surfaces such as metals, wood and masonry. Signs on buildings, structures, appurtenances, and along streets shall be repainted and touched-up. Traffic control signs shall be fabricated and painted in conformance with the most current Manual of Uniform Traffic Control Devices for Streets and Highways published by the American Association of State Highway and Transportation Officials. Traffic control signs shall conform to the latest edition of the Uniform Traffic Control Devices manual as prescribed by the U.S. Department of Transportation. All signposts shall be checked semi-annually for plum, square and level. Any sign missing or out of plum, square and level shall be realigned or replaced within seven days after notification.

5.5.4.3.5. Low, Medium and High Pressure Washing. The Contractor shall perform pressure washing services. The annual pressure washing responsibilities will be up to 100,000 SF of walls, windows, pavement and sidewalks as directed by the CO. The contractor is required to provide the adequate pressure power effective in ridding debris, dirt, loose paint, stains, mold, and mildew and fungal from building facades, windows and pavements. Use enough pressure, so as not to cause damage to any of the existing surface conditions. Any damages to the existing condition shall be repaired/replaced at the Contractors expense. This may include, but is not limited to repainting, trim work, caulking, roofing, flashing, HVAC units, etc… Use the lowest setting on the pressure washer for the applied surfaces and follow the manufacturers recommended instructions. No chemicals (chemical cleaning) are permitted, only pressurized potable cold water shall be used. The Contractor shall supply the water source for this operation; use of MOTSU water for this operation is not permitted.

5.5.4.3.6. Sheet Metal/Ironwork - Interior and Exterior. The Contractor shall maintain the capability to repair, replace or construct sheet metal and ironwork components of buildings, structures and installed building equipments and shall construct and install metal components in support of other maintenance activities. The Contractor shall perform all sheet metal and ironwork services. Metalworking shall include:

5.5.4.3.6.1. Heating and bending to form metal shapes, drilling, shearing, rock cutting, hammer forging, grinding, sawing, and fitting of metal parts. The Contractor shall also be responsible for welding all types of metals using electric, acetylene and/or inert gas shielded welding processes. Welding shall be performed on light, heavy gauge and hardened metals using flat, vertical, horizontal, and overhead positions. Processes include preheating, brazing, bead welding, flame cutting, pressure welding, and heat-treating.

5.5.4.3.6.2. Fabricating, installing, repairing, replacing parts or complete assemblies as required for: metal components of buildings (to include roof structures), metal parts of installed building equipment, dining facility equipment, kitchen equipment, utility systems, roadway structures, drainage structures, metal signs, installing anchorages in floors and walks to secure pilferable items. Performing welding shop services on equipment. Maintaining Sheet Metal Shop equipment. Assembling and fastening fabricated parts by installing bolts, rivets, screws, and/or seaming, soldering, and spot welding.

5.5.4.3.7. Keys and Locks. The Contractor shall have the capability to provide installation, repair and adjustment of electrical, mechanical and combination locks, latches, panic devices, door closures and strikes of different makes, sizes and shapes. These may be installed in building components. The Contractor's work shall include setting and changing lock combinations, re-core locks, making keys (upon approval of CO) and fabricating minor parts from raw stock.

5.5.4.3.8. Carpentry. The Contractor shall have the capability to provide all carpentry work to maintain, repair and alter all buildings, structures or facilities. The Contractor's work shall be planned and accomplished to offer maximum resistance to fungus, mildew, termites, water absorption and all other harmful effects caused by the environment.

5.5.4.3.8.1. All wood provided and installed by the Contractor in contact with concrete and masonry shall be preserved and treated by pressure methods and marked IAW the American Wood Preservers Institute Standards. Wood treated with waterborne preservatives shall be air and kiln dried to the moisture content IAW Western Wood Preservers Association (WWPA) Standards for lumber and marked with the word "dry". Treated wood shall be used in all exposed locations that lack protection from the weather. If a cut is made in treated wood, the cut shall be brush coated with a wood preservative.

5.5.4.3.8.2. All carpentry work performed shall be consistent with the construction and appearance of the existing facility or structure. Carpentry work shall include all work required to maintain, repair or construct facilities or structures such as structural framing and fabricating steps, ramps, approaches, footings, docks, etc, structural siding of wood, asbestos, etc (NOTE: Upon discovery of asbestos, the Contractor shall notify and receive direction from the CO before proceeding with the work); repairing stairs and floor coverings, broken steps, chipped tile, inlay units and damaged underlayment, repairing windows, interior/exterior screens, weather-stripping, glazing, installing window shades, etc; repairing/replacing doors, door frames, sills, trim and casings, locksets, hardware, fillings and similar items.

5.5.4.3.8.3. Contractor shall replace approximately 100 sq. ft, of broken glass annually to include installation in all buildings on the installation. Glass replacement shall be of the same type, dimensions, and quality as the original. The Contractor shall remove and dispose of cracked or broken glass. Glazing compound or sealant shall be removed and replaced. Damaged or deteriorated sashes, frames and other components shall be removed and replaced. Misaligned frames shall be realigned and made plumb. "Glass" replacement standards are at TE 22. Replacement glass shall be installed the same day damaged glass is removed. If this is not possible, the Contractor shall completely close and seal the window opening with one-half (1/2) inch thick plywood. Plywood shall be secured on the exterior and shall be mounted to deflect rain from the building. Temporary enclosures shall be subject to approval by the CO.

5.5.4.3.8.4. The Contractor shall perform carpentry work in response to Government approved SO work-authorization-documents.

5.5.4.3.8.5. The Contractor shall repair the wood signs and billboards, such as entrance sign, safety poster sign, etc.

5.4.4.3.8.6. The Contractor shall utilize repair/replacement materials consistent with existing materials (equal or better quality) to provide safe and sound end-work.

5.5.4.3.9. Masonry. The Contractor shall have the capability to provide all masonry work to maintain, repair and construct facilities or structures. All work shall be consistent with the construction and appearance of existing facilities or structures. Masonry work shall include all facility or structure work necessary to repair or replace foundations, walls, floor slabs, chimneys, brick, cornices and tuck pointing; to extend down spouts and divert water from exterior walls: and to remove soot, ash and similar items.

5.5.4.3.10. In unoccupied Family Housing Units, the Contractor shall, upon completion of identified work, turn off all lights, set thermostat at 55 degrees F (during winter months) or secure air conditioning (during summer months), and close and lock all windows and doors. Should the Family Housing unit remain unoccupied through a change of season, the Contractor shall reenter the unit and change the temperature controls to the appropriate winter/summer setting.

5.6. GROUNDS MAINTENANCE.

5.6.1. General. The Contractor shall provide all work necessary to maintain grounds to acceptable standards i.e., inspecting, servicing, repairing, improving, and maintaining all grounds, trimming, replacing turf, clearing storm damage, removing leaves, pinecones, correcting soil erosion problems, maintaining trees and shrubs, weeding, fertilizing, removing snow and ice, performing natural resource conservation, plowing soil, policing (litter control), removing trees and stumps, enhancing wildlife habitat, controlled burning, fire suppression, etc.

5.6.1.1. Background Information. The MOTSU complex includes four (4) distinct areas: the main installation at Sunny Point; the buffer zone across the Cape Fear River adjacent to Carolina Beach; the family housing area at Fort Johnston in Southport: and the Leland Interchange Yard nineteen (19) miles north of the main installation, and nineteen (19) miles of railroad right-of-way between the main installation and the Leland Exchange Yard as identified in this section and;

TE-1 Performance Requirement Summary,
TE-2 Workload Estimate,
TE-3 Maps and Work Area Locations,
TE-4 Required Reports
TE-5 Government-Furnished Items,
TE-21 Fence Locations,
TE-22 Plants and Mulch Areas,
TE-23 Irrigation Systems,
TE-24 Grass Seeding Requirements,
TE-26 Pesticides Currently in Use,
TE-27 Scheduled Pest Control,
TE-28 Mosquito Control and Monitoring.

5.6.1.2. MOTSU grounds are divided into three (3) levels of maintenance. Improved Grounds are intensely maintained and include grounds within the built up areas with lawns, landscaping, athletic facilities and the like. Semi-improved grounds require less maintenance and include road shoulders, ammunition storage areas, and roadway ditches. Un-improved Grounds require little or no maintenance, they include, fire breaks, forestlands, ponds, swamps, and similar areas. At MOTSU the largest category by far is considered Un-improved Grounds.

5.6.1.3. Damage. Contractor shall notify and provide a condition report to the COR of any existing damages to installation assets prior to the Contractor commencing work in the specific areas. If a condition report is not acknowledged by the COR, then the damages will be the responsibility of the contractor. Damage caused by the Contractor to installation assets i.e., utility poles, signposts, power outlets, telephone pedestals, fire hydrants, grounding system wires, wire molding and ground rods, and guy wires shall be repaired/replaced within two (2) working days of the incident. Plants or landscape materials damaged or girdled by the Contractor's action or equipment shall be repaired/replaced with like species, size. If that is not possible, a plant of like value may be substituted with the CO's approval. All repairs/replacements shall be at the Contractor's expense.

5.6.1.4. Drawings. Mowing shall be performed at frequencies, zones and heights listed in TE-3, Mowing Requirements.

5.6.2. Government Furnished and/or Shared Equipment. The Government shall provide equipment stipulated in TE 5. The Government makes no representation that the GFE listed in the attachment is sufficient to accomplish the requirements of the contract. The Contractor shall provide any equipment required to accomplish the listed work if the Government furnished equipments provided are found to be insufficient to accomplish the job.

5.6.3. Contractor Furnished and/or Operated Equipment. Mowers used for grass cutting operations on the Main Access Road, Administrative Areas, Brunswick Road from Fire Station to Post #2 and on Fort Johnston (approximate total of thirty eight (38) acres) shall be mulching type mowers or conventional mowers equipped with mulching blades with discharges blocked.

5.6.4. Grounds Management Overview. The Contractor's scheduled grounds operations include: grass cutting; edging; grass trimming; pruning trees and bushes: fertilizing; policing grounds; removing leaves; pinecones and straw; inspecting and maintaining barricades (earth berms): inspecting and dredging drainage ditches: inspecting and repairing fences; irrigating grass and shrubs, and maintaining the post baseball field, fitness trail (behind bldg 12), and exercise trail (by bldg 44).

5.6.4.1. Records and Reports. The Contractor shall prepare the following records and reports and submit them to the CO at the time and in the format specified in 5.1.1.2.6.

5.6.4.1.1. Barricades (earth berms) Inspection Report,

5.6.4.1.2. Drainage Ditch Inspection Report,

5.6.4.1.3. Soil Sampling Lab Results,

5.6.4.1.4. Fence Inspection Report,

5.6.4.1.5. Exercise Trail Inspection Report.

5.6.5. Level I, Preventative Maintenance (PM) Tasks and Standards.

5.6.5.1. Annual Mowing Schedule. The Contractor shall submit an Annual Mowing Schedule for review and approval by the CO. The schedule will show by month and week when each zone will be mowed.
5.6.5.1.1 Additional Mowing. In addition to the annual mowing schedule identified in TE-3, an early and late one time mowing of approximately 5 acres each shall be required by request. Early mowing will consist of approximately 5 acres to be mowed sometime in month of March and Late will consist of approximately 5 acres to be mowed sometime in the month of November.

5.6.5.1.2 Downrange Mowing, administrative areas beyond Security Post 2. The following facilities require mowing: Building No. 18 and gazebo, approximately 1 acre, shall be mowed as part of zone 1 requirements referenced on sheet TE3-25. Areas is not specifically stated on the legend but is detailed on the drawings.

5.6.5.2. Mowing Performance. Vegetation shall be cut uniformly to heights listed on TE-3. The Contractor shall keep equipment properly adjusted and mowing blades sharp to ensure an even cut. The Contractor shall prevent scalping, uneven mowing, or rutting by the equipment and shall take care not to damage trees and shrubs.

5.6.5.3. Family Housing/Fort Johnston. The entire grassed area shall be mowed and edged each Friday, unless a Federal holiday falls on Friday, then the mowing shall be accomplished on the preceding day.

5.6.5.4. Edging. Sidewalks, driveways, roads, and curbs and objects adjacent to lawn, shrubs and landscape beds located in administrative area, visitor center, and other highly visible areas shall be edged once each month from April through November, (except Family Housing). All debris shall be removed the same day edging is performed. There are 5,280 linear feet of sidewalks, driveways, roads, and curbs as indicated on the General Site Map. The Contractor shall schedule edging operations at intervals of not less than twenty-five (25) days.

5.6.5.5. Grass Trimming. Grass trimming shall be performed in conjunction with grass mowing. Grass shall be trimmed from around trees, shrubs, fences, utility poles, fire hydrants, buildings, structures and parking lot bumper blocks so that the those areas are maintained at a height consistent with the adjacent grass. String trimmers shall not be used around trees where the string can damage the bark unless an approved protective covering is in place. All debris shall be removed the same day trimming is performed. When visual accumulations of clippings do occur after twenty-four (24) hours, the Contractor shall, upon notification, remove these clippings within two (2) hours.

5.6.5.6. Barricades (earth berms). Twenty (20) acres of brush shall be eradicated on the barricades each year. All woody stemmed vegetation greater than twenty-four (24) inches in height and/or larger than four (1) inches in diameter at the ground line shall be cut and removed to an approved site as directed by the CO. The Contractor shall cut and chemically treat the stumps of woody vegetation. Stumps shall be treated within one (1) hour of being cut. A dye shall be included in the herbicide to mark the stumps treated. Vegetation cutting shall be completed between 15 January and 1 April.
5.6.5.6.1. Woody vegetation less than twenty-four (24) inches in height may be treated by foliage spraying with a selective herbicide approved by the CO. Foliage spraying shall be completed between 15 April and 30 June.

5.6.5.7. Open Drainage Ditches. The Contractor shall dredge approximately ten (10) miles of drainage ditch annually in the terminal, the Leland Interchange Yard, or the Buffer Zone. (This dredging is in addition to firebreak ditches, which are pulled by the road grader).

5.6.5.7.1. Ditches shall be cleared of debris to allow the free flow of water. Debris taken from ditches may be placed on the cleared right of way adjoining the ditch lines, allowed to dry, spread to a level surface, and seeded with an approved grass mixture. Or in some situations, the CO may direct the material removed from ditches to be hauled to a designated dumpsite.

5.6.5.7.2. The right-of-way along designated ditches shall be cleared of brush and trees prior to dredging operations as directed by the CO. Ditches containing woody vegetation shall be cleared of brush thirty-five (35) feet on both sides of the centerline of the existing ditch bottom (or to edge of woodland) and the brush disposed of at a site designated by the CO.

5.6.5.8. Brush Cutting. The Contractor shall cut twenty (20) acres of heavy brush annually. The areas to be cut will be designated by the CO. This brush-clearing requirement is in addition to all other brush cutting, brush clearing, and mowing operations identified in the contract.

5.6.5.9. Fertilizing and Liming. The Contractor shall apply a commercial type granular fertilizer on approximately seventy- (70) acres of Improved Grounds at application rates and chemical compositions recommended by the soil sample results required in 5.6.3.1.3. (Historically, MOTSU uses approximately six hundred (600) lbs. of fertilizer per acre annually; however, soils analysis vary and recommendations of eight hundred (800) pounds per acre have been received). Lime shall be applied according to the amount per acre required by the soil analysis.

5.6.5.10. Tree and Shrub Care. The Contractor shall maintain all trees, shrubs, vines, and ground covers on Improved Grounds. Landscape plants requiring maintenance are listed in TE-22. They include approximately 4,600 ornamental trees and shrubs.

5.6.5.10.1. Pruning shall be performed by the Contractor in accordance with National Arborist Association Standards for Pruning, and Maintaining Shade Trees, latest edition.

5.6.5.10.1.1. Each year, an additional twenty (20) trees identified by the CO, shall be pruned/trimmed to remove damaged or decaying limbs, provide shaping, or remove limbs that threaten buildings or other facilities. This work is in addition to other tree and shrub care identified in paragraph 5.6.5.10.

5.6.5.10.2. Shrubs and hedges in administrative areas, visitor center, and the Family Housing area at Fort Johnston shall be pruned three (3) times annually to maintain their existing growth characteristics/shape. Hedges shall be pruned a minimum of three (3) times between 15 May and 15 October or as otherwise required or directed by the CO. Shrubs and hedges shall be fertilized with a 23-10-5 fertilizer mixture two (2) times a year; spring, prior to 1 June, fall, prior to 15 October. The shapes of hedges shall not be changed without prior approval of the CO.

5.6.5.11. Policing Grounds. The Contractor shall pick up and dispose of trash and litter on ninety-three (93) acres of Improved Grounds twice weekly on Monday and Friday. Picnic grounds and access road shall be policed every Friday 1 May through 30 November and once monthly the remainder of the year, four acres. Four hundred and fifty-five (455) acres of Semi-improved Grounds shall be policed semi-annually. Trash and litter includes paper, plastic, bottles, cans cardboard, cigarette butts, lumber, rags, abandon metal parts of vehicles, Milvans or buildings, cable and other foreign material to include of disposing of garbage from the tennis courts and play area at Fort Johnston. Small litter such as cigarette butts will be exempted from policing for semi-improved grounds. The areas to be policed are shown on the Policing map in TE-3.

5.6.5.12. Sweeping. The Contractor shall keep all parking areas, hardstands, truck pads, TA-1, TA-2, TA-3, Re-stuff facility, Classification yard, roadways, and intersections free of loose gravel and/or all other debris by sweeping. The sweeping of parking areas and streets shall be accomplished during non-duty hours. Sand and gravel that accumulates at asphalt surfaced road junctions or curves and/or constitutes a vehicle-driving hazard. Removal from hard surface roadways should be accomplished within twenty-four (24) hours of notification or sighting. The CO may direct, with a 24-hour notice that policing be performed due to special events. The streets shall be swept as required due to climatic and operational conditions as required as a minimum, paved streets and parking areas shall be swept as shown in TE-3.

5.6.5.12.1. Leaf Removal. During the period April through December, the Contractor shall remove pine needles, pinecones, and fallen leaves from roadways, grass areas, open culverts, around buildings, fences, and from other areas identified as improved grounds. Leaf removal shall be performed approximately five (5) times a year when directed by the CO.

5.6.5.13. Debris Disposal. Organic debris such as leaves, clippings, and pine straw, as well as larger organic debris such as trees, limbs, and branches shall be disposed of in an area designated by the CO.

5.6.5.14. Irrigation. The Contractor shall maintain ground moisture levels at sufficient levels to maintain healthy growing conditions, TE 23 and TE 24. If, during the period 1 May through 31 October, rainfall is less than one (1) inch in any seven (7) day period the Contractor shall irrigate lawns, shrubs, and trees in the Administration Area, Visitor's Center, and Fort Johnston with one (1) inch of water. Fort Johnston requires the use of a portable system. In the event, plants continue to show signs of drought stress the Contractor shall water plants more frequently. During average years, the grassed areas may require - ten (10) times per year, and shrubs areas ten (10) times per year. However, during abnormal years, climate conditions may require a 50 percent increase in the irrigation frequency.

5.6.5.14.1. If necessary, the Contractor shall use portable equipment to irrigate the Administrative Area, Visitor Center, and Fort Johnston.

5.6.5.14.2. Irrigation water shall be applied to turf, shrubs, and trees in a uniform manner. Precautions shall be taken to prevent runoff into streets or drainage ditches, and accumulation in low areas. Water for Fort Johnston shall be obtained through the City of Southport and shall be approved by the Southport Public Works Director prior to application.

5.6.5.14.3. Installed Irrigation System Maintenance. The Contractor shall maintain the irrigation systems installed in the Administrative Area as described in TE-23. Maintenance of the irrigation system shall include winterizing the system. Any damage to the installed irrigation system resulting from the Contractor's grounds maintenance activities shall be the responsibility of the Contractor.

5.6.5.15. Fence Maintenance. Installation fences shall be inspected annually and a hardcopy of the report provided to the CO. Repairs required as a result of the annual fence inspection (TE-21) shall be ordered by the issuance of a Level II service order. Upon completion of approved work, all posts shall be set tight (posts shall be plum, level and square) wire shall be stretched tight with no sags or holes, and all damages repaired. The gauge of all fencing shall be nine (9) American Wire Gauge (AWG), all fencing shall be galvanized type. In fences where wooden or plastic strips are installed between links of fence, the Contractor shall repair or replace broken or damaged strips. Repairs shall be completed by 1 May.

5.6.5.16. Baseball Field. The Contractor shall disk and drag the infield to eliminate grass and keep the field in good playing condition two (2) times a year between 15 April to 31 October as directed by the CO. Due to special events, the CO may direct the baseball field be disked and dragged an additional two (2) times each year.

5.6.5.17. Exercise Trail. The Contractor shall maintain the exercise trail identified by dashed lines on the General Site Map. Inspection of the trail bridge shall be performed quarterly. The Contractor shall provide an inspection report to the CO within five day after each inspection. Any deficiencies in the bridge shall be corrected.

5.6.5.18. Fitness Trail. The Contractor shall maintain the MOTSU Fitness Trail. The approximately one (1) mile long trail starts at a wooden bridge east of the fire station and travels through the woods, north of Brunswick Road to a point just west of the truck inspection building where it crosses Brunswick Road. It returns through the woods south of Brunswick Road to the parking lot across the road from the fire station. The four (4) feet wide trail is constructed with two (2) inches of 78M rock over a six (6) Mil polyethylene barrier. The trail is bounded on both sides with three (3) inch by four (4) inch treated landscape timbers in eight (8) foot lengths. the timbers are anchored with one-half inch reinforcing rods. The fitness trail bridge is made from treated wood. Maintenance shall include the following: keep the trail clear of vegetation by spraying the trail (not more than two (2) times per year) with a weed killer as approved by the CO: reposition and anchor landscape timbers as necessary; add additional stone in areas where the total thickness is less than two (2) inches; tighten bolts on bridge as necessary; and inspect the trail semi-annually.

5.6.5.19. Woodland Management. The Contractor shall plant Government furnished pine seedlings (36,000 seedlings) on forty- (40) acres of Government prepared sites between 1 December and 31 March, annually. Sites may be scattered throughout the main installation, Carolina Beach Buffer Zone, and the Leland Interchange Yard. A successful planting will be a 70% seedling survival rate at the end of the first growing season. If the seedling survival rate is not successful due to the fault of the Contractor, it shall be his responsibility to secure additional seedlings and establish a successful planting. The Contractor shall erect and maintain a sign at each plantation stating the type of tree and year planted.

5.6.5.20. Unscheduled Level 1 Operations. The Contractor shall perform the following unscheduled activities as part of grounds maintenance.

5.6.5.20.1. Tree and Stump Removal. The Contractor shall cut and remove forty- (40) trees with an average breast height diameter of twelve (12) inches. When directed by CO, limbs and trunks greater than four (4) inches in diameter shall have smaller limbs removed, then cut into sections ten (10) feet or less in length and disposed of in an designated area. Stumps of trees removed from improved grounds shall be removed to a depth of eight (8) inches below ground level. The hole shall be filled with soil, the area over seeded, and the grade line reestablished after settling. (Estimated one (1) stump grinding every four (4) years.)

5.6.5.20.2. Turf Repair and Re-establishment. Areas damaged by recreational activities, vehicular traffic, utility system repair, building repair or demolition, pollution, spills, disease, soil erosion or normal wear and tear shall be excavated and filled in (as appropriate), leveled, seeded or sodded, and maintained to conform to adjacent turf areas. Undesirable material shall be removed before filling. Approximately 24,000 square feet of turf requires re-establishment annually. The standard for seeding is contained in TE-24.

5.6.5.20.3. Mulching. The Contractor shall maintain planting beds; hedges, shrubs and tree saucers with three (3) inches of nugget size pine bark mulch, TE-22. The Contractor shall remove grass and weeds prior to mulching and keep mulch out of the crowns of shrubs and off buildings, sidewalks, light standards and turf. The existing mulch may be fluffed up and used if it is free of soil, debris and weeds and a thin layer of fresh mulch is applied to give mulched areas a uniform color and texture. All mulched areas shall be kept free of weeds and grass. Approximately 1,000 cubic feet of mulch will be required annually.

5.6.5.20.4. Specific Requirements. The Contractor shall perform grass mowing, edging, and shrub pruning on improved grounds for special occasions in addition to the requirements specified in TE 3 and 5.6.5.1. The Contractor shall be notified of the areas to be mowed, edged, and pruned and shall perform the specified services within 16 hours of notification. It is anticipated that this service shall be required three (3) times annually, on an area not exceeding four (4) acres each occurrence.

5.6.5.20.5. Special Events. The Contractor shall provide labor and support for special events within one (1) day of request. Some examples are blood drives, Change of Command ceremonies, Family Day, and outdoor holiday ceremonies. Contractor support for these events includes setting up/taking down and storing chairs and tables, erecting platforms, placing speaker podium, assisting with speaker wiring and temporary electrical outlets, setting up/taking down and storing one (1) or two (2) tents, setting out flags and flag staff holders, putting up bunting, temporary barricades and temporary signs. The Contractor shall setup/take down tables and chairs in the Community Center or other inside areas. Actual support will vary by event. There are approximately twenty (26) events per year.

5.6.5.20.6. Storm pre and post response. The Contractor shall provide both pre and post storm support when called upon by the CO. Historically, approximately four (4) storms occur annually.

5.6.5.20.6.1. Pre-storm response is required within two (2) hours of notification by the CO. Functions required in this contract are;

1.) Lower and secure moveable tower lights on wharfs, north and south hardstands, and any other location on Terminal with moveable lights.
2.) Install precut plywood storm shields at windows and doors at the Garrison House,
3.) Extract patrol boat dock form water and place on Government provided haul frame.
4.) Assist at different locations securing material, buildings and equipment.

5.6.5.20.6.2. Post-storm functions required are:

a.) Inspect light towers for damage, repair any damages, and raise to the locked position all moveable lights.

b.) Remove storm shields form Garrison House and store in Government provided shed.

c.) Assist in checking for damage and re-establishing Terminal operation, and/or general removal of fallen trees, limbs, debris, or silt, deposited by water runoff on Improved and Semi-Improved grounds as a result of storms, shall start within eight (8) hours after being direction by the CO. Grass cutting, trimming, edging, and tree pruning may be suspended by the CO for storm damage clean up.

5.6.5.20.7. Wildlife Habitat Improvements. The Contractor shall furnish labor, material, and equipment to support habitat improvement activities for the following: a herd of approximately four hundred fifth (450) deer, a flock of forty (40) wild turkeys, and a small population (possibly less than 100 reptiles) of American alligators. In addition, control burning shall be accomplished on the entire area owned by MOTSU to provide fire hazard reduction, habitat improvements and timber management. Weather conditions will dictate the number of days to

be worked on this project. Before burning begins work shall include plowing control lines (total of seventy-five (75) miles approximately forty (40) miles/yr), moving debris away from structures and raking all debris fifteen (15) feet from all trees associated with the Red Cockaded Woodpecker. Plowed fire line construction and maintenance shall be performed between the 1st of October and the end of 1st of April. Control burning may be done throughout the year but usually occurs from 1 January through 15 July. Control burning shall be performed between 11:00 AM and 1:00 AM the next morning. Once burning starts, contract operator will stand by with a plow unit, until released by forester. Contractor shall also furnish personnel (numbering six) to set and help control fire from spreading. Annually, these activities require approximately 1,100 man-hours, half of which are outside of the normal terminal work time of 7:30 AM to 4:00 PM.

5.6.5.20.8. Wildlife Food Plots. The Contractor shall establish fifteen (15) acres of wildlife food plots for small game, turkey and deer populations. The work includes plowing, disking, fertilizing, sowing and mowing these areas. Summer or winter food plantings shall be established on the fifteen (15) acres. Summer plantings shall be completed by the last week of April and use a seed mixture approved by the CO. Winter plantings will be established by the third week of September. Ten (10) acres of the food plots will be bush hogged as directed by the CO during the last two (2) weeks in August.

5.6.5.20.9. Fire Suppression. The Contractor shall provide labor, equipment, and materials for suppression of uncontrolled grass and woodland fires. This service shall cover all MOTSU controlled property and adjacent property when a fire has spread from land controlled by MOTSU and/or is threatening land controlled by MOTSU. The Contractor shall also provide required services to the Mutual Aid Fire Agreement contract between NC Division of Forestry and specific local Governments. The Contractor shall work under the supervision of the Division of Public Works or the NC Division of Forestry whoever is in charge of that specific fire. Approximately ten (10) man-hours will be required annually for fire suppression.

5.6.6. Level II, Service Order (SO) Tasks and Standards.

5.6.6.1. General. The Contractor shall perform Level II service order work as defined in Section 5.1.1.2, in accordance with standards established in the contract for grounds maintenance.
5.6.6.2. Emergency Work. Emergency services shall include clearing downed trees that affect traffic or security, correction of washouts, break up of beaver dams causing flooding, and other services of this nature.

5.6.6.3. Unscheduled Level II Tasks and Standards.

5.6.6.3.1. Typical Tasks performed. Typical unscheduled grounds Level II services include those identified in 5.6.5. above plus the following:

5.6.6.3.1.1. Landscape Plant Replacement. The Contractor shall replace trees, shrubs, and groundcovers killed by disease, winterkill, drought, damage, or acts of God. Normally, trees and shrubs should be replaced during the fall or spring season, however, at the Contractors risk, plants can be replaced at any time of the year if they are mulched and watered regularly. Replacement plant materials and plantings provided by Contractor shall conform to industry standards as outlined in American Standards for Nursery Stock ANSI Z-60.1.

5.6.6.3.1.2. Snow and Ice Removal. Snow and ice are unusual for MOTSU, however, on those occasions when snow or ice occur, the Contractor shall be responsible for snow and ice removal from wharves, streets, highways, parking lots, and walkways at the direction of the CO. The priority for snow and ice removal operations shall be governed by safety considerations for personnel in support of terminal operations and by cargo movement requirements. On regularly scheduled workdays on which rain/or freezing rain and/or snow has fallen with a temperature below 32°F, the Contractor shall, three (3) hours prior to normal daylight working hours, have snow removed from open parking lots in administrative areas. Snow shall also be shoveled from entrances to office buildings and sidewalks shall be salted. If ship-loading operation is in progress, wharfs shall be cleared of snow and salted where areas are iced over. Sand shall be applied to ramps and if needed front of smokers and center buildings. Salt shall be spread in front of all operations building entrances. Salt shall also be spread forty (40) feet either side Posts 1, 1A, and 2;. each side of 1A's signal lights; at stop signs and caution lights; at junctions of Explosive and Access Road.

5.7. PAVED, GRAVEL AND EARTH ROADS, AND HARDSTANDS.
(to include Fire Breaks)

5.7.1. General. The Contractor shall inspect, schedule, and perform maintenance, and repairs, of all roadways, surfaced areas and support facilities to include paved and unpaved roads, streets, parking lots, sidewalks, recreational areas, erosion control, drainage systems and related areas, and associated structures and appurtenances on MOTSU post-wide, including the Family Housing Area, Leland Interchange Yard, rail right-of-way, and the Carolina Beach Buffer Area as identified in this section and;

TE-1 Performance Requirement Summary,
TE-2 Work Estimate,
TE-3 Maps and Work Area locations,
TE-4 Required Reports,
TE-16 Building Characteristics.

5.7.2. Surfaced Area Overview. There are approximately 827,448 square yards of paved roads, parking area and open storage: 362,114 square yards of unpaved roads: 4,100 linear feet of sidewalks: 900,000 linear feet of storm drainage: with associated accessories such as bridges, culverts, curbs, gutters, head walls, traffic signs and devices.

5.7.2.1. Drawings. The paved surfaces overview drawings are shown in TE-3 and identify road systems and types of roads. TE-3 identifies sweeping requirements.

5.7.3. Level I, Preventative Maintenance (PM) Tasks and Standards.

5.7.3.1. Operation. The Contractor shall provide all maintenance and repairs to paved unpaved roads, and fire breaks throughout the installation properties.

5.7.3.1.1. Records and Reports. The Contractor shall maintain the following records and logs and submit them to the CO at the time and in the format specified in TE-4.

5.7.3.1.1.1. Annual Paved Road and Surfaced Area Inspection Report.

5.7.3.1.1.2. Annual Drainage System inspection Report.

5.7.3.1.1.3. Annual Bridge Inspection Report.

5.7.3.1.1.4. Monthly Road and Shoulder Maintenance Report.

5.7.3.1.1.5. Annual Pavement Marking Plan.

5.7.3.1.1.6. Drawings, Maps and Records Maintenance. System maps, as-built plans “hardcopy Red-Lines”, and records shall be kept up-to-date by the Contractor to include maintaining a complete verified drawing of all changes to signs or sign locations to be submitted to the CO upon request

5.7.3.1.2. Paved Surfaces Maintenance and Repair. The Contractor shall maintain and repair paved surfaces in according with the latest edition of the NC Department of Transportation, Standard Specifications for Roads and Structures. During the month of May, inspect all surfaced areas and related structures. A written record of all inspections shall be retained by the Contractor and shall be made available to the CO upon request. Specific areas the Contractor shall inspect are as follows:

5.7.3.1.2.1. Shoulders, Paved Surfaces. Inspect and maintain pavement related shoulders to protect the basic structure, maintain the pavement edge, eliminate traffic hazards, and provide proper drainage. There are approximately thirty-six (36) miles of road with 10,000 LF of shoulder requiring work each year. There are also sixty-six (66) ammunition storage hardstands and truck parking pads, which have about 175,792 square yards of pavement surface with about 39,000 LF of pavement edge, which requires inspection and maintenance. Approximately three hundred (300) cubic yards of fill annually may be required to support this requirement. A fill

pit site may be designated on post by the CO or material may have to be obtained off post at the Contractors expense.

5.7.3.1.2.2. Potholes, Upheavals, and Alligator Cracked Repair. Areas shall be repaired by first removing damaged material to firm base. Cut the edges of the repair vertically, squaring and tacking the face of the cut. Once the repair site base material meets compaction requirements, prime and patch. It is anticipated that the quantity of potholes to be repaired will be approximately five (5) per year.

5.7.3.1.2.3. Traffic Flow. Maintain the free flow of traffic during pavement repairs through the use of traffic control methods or devices. The Contractor shall inform the CO three (3) days in advance of planned detours or potential disruptions of traffic flow due to scheduled maintenance and repair.

5.7.3.1.3. Gravel and Earth Roads and Areas Maintenance and Repair. The Contractor shall maintain and repair earth surface roads and areas in accordance with Department of Defense standards and the NC Department of Transportation, Standard Specifications for Roads and Structures. The work shall include the following:

5.7.3.1.3.1. Ruts, Washes, Low and High Area PM. The Contractor shall level ruts and washes, fill in low areas, and cut down high areas, to achieve the specified grade and slope, twice (2) each year, once in the spring and once in the fall.

5.7.3.1.3.2. Shoulders, Gravel and Earth Roads and Areas. Maintain shoulders to allow surface drainage and to protect the road edge. Approximately 10,000 linear ft. of work shall be required on all paved road shoulders annually and approximately 360,000 linear feet of work on all gravel roads. This is only about 2 miles of road – only one mile if both sides in addition doing all doing all gravel roads on both sides (34.88 miles of gravel roads x 2 = 69.76 miles x 5280 feet = 368,332 LF).

5.7.3.1.3.3. Blading and Dragging. Maintain gravel and other earth surface roads by blading or dragging the surface until all ruts and holes are filled. Maintain a smooth surface and uniform crown that permits proper drainage. Blading shall be accomplished on a five (5) week cycle. Contractor shall interface with the Public Works Land Management Division and coordinate a schedule for using the motor grader. Ditches shall be maintained annually to prevent vegetation from impeding the flow of water. The Contractor shall provide approximately two hundred (200) cubic yards of fill material and fifty- (50) cubic yards of aggregate each year for repair of earth surfaced roads. A fill pit site may be designated by the CO on port, or material may have to be obtained off post at the expense of the Contractor.

5.7.3.1.4. Vegetation Control. The Contractor shall remove vegetation from pavement cracks, joints, etc., as outlined in paragraph 5.8.6.3.8.2.

5.7.3.1.5. Storm Drain System Maintenance and Repair. The Contractor shall maintain and repair the storm drainage systems. The work shall include the following:

5.7.3.1.5.1. Runoff. To maintain proper runoff, the Contractor shall inspect and repair damaged inlet gratings, clean catch basins, drop inlets, manholes, and similar structures on a regular schedule. The schedule shall be based on the rate of silting or clogging with debris.

5.7.3.1.5.2. Clogged Storm System. Inspect and clear clogged storm sewers as required by paragraph 5.7.3.1.9.

5.7.3.1.6. Erosion Control. The Contractor shall perform the following erosion control services:

5.7.3.1.6.1. Maintain curbs, gutters, swales, dikes, etc., to provide for adequate drainage and control of road shoulders and hardstand area erosion.

5.7.3.1.6.2. Control and repair erosion problems by maintaining energy dissipaters, curb structures and vegetation covers.

5.7.3.1.7. Bridge Maintenance and Repair. The Contractor shall maintain and repair the Governors Creek bridge (a light vehicle, wooden structure bridge).

5.7.3.1.7.1. Repair of bridge shall be accomplished IAW TM 5-624 based on the specific type of bridge. Report all defective conditions found to the Contracting Officer.

5.7.3.1.8. Concrete Pavements and Joints. After major storms, inspect concrete pavements and joints for spalling, scaling, cracking, pumping, settlement, etc. Report all defective conditions found to the Contracting Officer.

5.7.3.1.9. Drainage System. Inspect for debris, cave-ins. and other stoppages in storm water drainage systems. Check systems for peak load requirements during storms and make note of any deficiencies. Inspect culverts, inlet headwalls, and exits for erosion sediment and wash. Report all defective conditions found to the Contracting Officer.

5.7.3.1.10. Retaining Walls. Annually inspect for signs of deterioration in retaining wails, e.g., rust in metal structures, damage and decay in wood, and cracking, spalling or chemical damage in concrete. Report all defective conditions found to the Contracting Officer.

5.7.3.1.11. Repainting.
The Contractor shall prepare an annual Marking Plan for the CO's approval. Annual repaint of 10 miles of the total facilities roadway markings shall be programmed. This shall include markings (for example, center and edge lines, parking lot striping, curb lines, parking stalls, stop lines, cross walks, railroad crossings, turn arrows, etc.) on all roadways, truck parking areas, security barriers and posts, transfer areas, hardstands, classification yards and other areas as required. All marking designs shall meet the minimum requirements of the current issue of the Manual for Uniform Traffic Control Devices published by the American Association of State Highway and Transportation Officials. All roadway painting shall meet the minimum requirements of the latest edition of the NC Department of Transportation, Standard Specifications for Roads and Structures, section 920. Pavement marking tape shall not be allowed. All painting shall have glass beads installed IAW the latest edition of the NC Department of Transportation, Standard Specifications for Roads and Structures.

5.7.4. Level II, Service Orders (SO) Tasks and Standards.

5.7.4.1. General. The Contractor shall perform Level II service order work as defined in section 5.1.1.2. in accordance with the latest edition of the NC Department of Transportation, Standard Specifications for Roads and Structures.

5.7.4.1.1. Emergency Work. Emergency services include emergency repairs to roads and bridges that affect traffic or security, correction of washouts, and other services of this nature.

5.7.4.1.2. Typical Tasks performed. Typical unscheduled maintenance and repair of Level II services include those identified in 5.7.3.1. through 5.7.3.1.9.7. above, plus the following:

5.7.4.1.2.1. Repair or replace damaged or washed out sections of paved or unpaved roads.

5.7.4.1.2.2. Excavate and replace pavement to gain access to sewer or drainage facilities or other utilities for repair work.

5.7.4.1.2.3. Repair or replace headwalls to prevent erosion or scour the embankment adjacent to culvert inlets.

5.7.4.1.2.4. Patch pavement and painting on recreation facilities playing courts to maintain surface.
5.7.4.1.2.5. Maintain drainage system around recreation facilities playing fields to include court ditches and sluice ways to direct water flow.

5.7.4.1.2.6. Maintain playground equipment at the Family Housing Area including sliding board, jungle gym bar, swing set, and basketball goal.

5.7.4.1.2.7. Perform maintenance and repairs discovered during inspections that exceed the Contractors responsibility to correct as part of the PM program.

5.7.4.1.2.8. Sweep debris caused by storm-force winds from roads, hardstands and other surfaces.

5.8. PEST MANAGEMENT.

5.8.1. General. The Contractor shall provide all necessary personnel, management, materials, tools, labor, supervision, general and specialized equipment and clothing, to perform integrated pest management techniques in accordance with contract requirements at Military Ocean Terminal (MOTSU), Sunny Point. Areas receiving pesticide services shall be maintained in a pest-free and safe condition in accordance with AR 200-5 Pest Management and the MOTSU Installation Pest Management Plan. The pest control functions required in the contract are:

1.) Household Pest,
2.) Structural Pest,
3.) Control of Pests of Medical Importance,
4.) Ornamental and Turf Pest,
5.) Vegetation,
6.) Forest Pest,
7.) Aquatic Pest,
8.) Miscellaneous Pest.

5.8.1.1. Background Information. Pest control services shall be provided on MOTSU post-wide, including the Family Housing Area, Leland Interchange Yard, Railroad access right-of-way, and the Carolina Beach Buffer Area as identified in this section and;

TE-1 Performance Requirement Summary,
TE-2 Workload Estimate,
TE-3 Maps and Work Area Locations,
TE-4 Required Reports,
TE-5 Government Furnished Items,
TE 21 Fence Locations,
TE-21a Fence and Motion Sensor Vegetative Treatment Areas,
TE 21b Sterilization and/or Snail Bait Treatment Areas,
TE-25 Traffic Regulatory and Guidance Signs,
TE-26 Pesticides Currently in Use,
TE-27 Scheduled Pest Control,
TE-28 Mosquito Control and Monitoring Locations.

5.8.1.2. Qualification/Certification and Health Requirements of Pest Control Personnel. No pesticide shall be applied by personnel not certified in the State of North Carolina in the appropriate category being administered. See Section 1.

5.8.1.2.1. Pest Control Applicator (PCA). The PCA shall possess the applicable certification for the pesticide control category being performed. The PCA shall be qualified in the management and coordination of integrated pest management techniques. An Initial and annual physical examination to establish a baseline red blood cell (RBC) and cholinesterase level is required. Examination shall include pulmonary, liver, and kidney function test, and a complete blood count. Current immunization against rabies, Lyme disease is required. Others immunizations may be required as necessary.

5.8.1.3. Warranties. The Contractor shall provide the CO with a five-year (5) written warranty against existing and new infestations of subterranean termites, for the areas treated. The warranty shall state that the chemical concentrations, rates, and methods of application complied with the Environmental Protection Agency (EPA) label. The warranty period shall commence from the date of acceptance by the CO. Visual sightings of pests, additional damage, new mud tubes, or other signs of living pests within the structure during the warranty period, shall be

grounds for re-treatment at no additional cost to the Government. Any structural damage caused by re-infestation shall be repaired at no additional cost to the Government.

5.8.1.4. Publications and Directives (See Sections 1. and 6.).

5.8.1.5. Endangered Species. All control activities shall be accomplished in a manner so as to assure maximum protection of endangered species and environmental quality IAW PL 91-190, National Environmental Policy Act of 1969; PL 93-205, Endangered Species Act of 1973; Executive Order (EO) 123342. Environment Safeguards, 8 Feb. 71; EO 12088 and EO 12217. Federal Compliance with Pollution Control Standards, 13 Oct. 73.

5.8.1.6. Drawings and Graphics. The areas requiring Contractor mosquito larvaciding and adulticiding, dip sites and monitoring stations are listed on TE-21a and shown in TE-3.

5.8.1.7. Pest Management Hours of Availability and Schedule. The Contractor shall have certified personnel available twenty-four (24) hours per day, seven (7) days per week, including holidays to respond to emergency services. Routine maintenance shall be performed; only during regular business hours unless otherwise directed by the CO.

5.8.1.7.1. Mosquito Schedule. Mosquito adulticiding should normally be performed during the early morning hours of 5:00 AM to 7:00 AM, weather conditions permitting, otherwise the CO may require evening treatment after 8:30 PM or the next work day.

5.8.2. Government Furnished and/or Shared Equipment. The Government shall provide equipment stipulated in TE 5. The Government makes no representation that the GFE listed in the attachment is sufficient to accomplish the requirements of the contract. If the equipments are not sufficient to sufficient to accomplish the required work, the Contractor shall provide all required additional equipments.

5.8.3. Contractor Furnished and/or Operated Items.

5.8.3.1. Equipment Calibration. Calibration shall be completed prior to the beginning of an operation and any time the machine has been repaired. The Contractor shall furnish proof of equipment calibration to the CO within three (3) working days after calibration is completed. Calibration shall be required on the following types of dispersal equipment:

a.) mist blowers shall be calibrated at the beginning of each spraying year and every 50 hours of use thereafter to determine the pumping rate in gallons per minute;

b.) hydraulic sprayers shall be calibrated for each specific operation (the pounds or gallons per specific area to be covered must be determined IAW label directions and specifications);

c.) hand sprayers (garden) shall be calibrated for each operation; and

d.) garden hose attachments for chemical dispersal shall be calibrated for each operation and are required to have backflow attachments.

5.8.3.1.1. Equipment Malfunctioning. If the CO believes machinery is malfunctioning, a calibration may be requested at no extra cost to the Government.

5.8.3.2. Vehicles. Contractor employee privately owned vehicles (POV's) shall NOT be used to transport pesticides. The Contractor shall have vehicles designated for "Pest Management Use Only". Vehicles used to transport pesticides shall be equipped with air conditioner, fire extinguisher, spill and decontamination kit, emergency wash water and eye lavage. All vehicles used for pest control services shall display appropriate markings indicating that they are carrying, and are contaminated with, pesticides.

5.8.3.2.1. Vehicle Security. All pesticides carried on vehicles shall be secured in locked compartments at all times. Vehicles shall not be left unattended or in a condition that would leave occupants within the area exposed to safety hazards, harm or injury.

5.8.3.2.2. Vehicle Appearance. All vehicles shall be maintained in a clean and orderly appearance, free from observable pesticide spills or residue. Vehicles shall not be cleaned or washed on Government property without prior approval of the CO.

5.8.4. Pesticides.

5.8.4.1. Pesticide Approval. All pesticides used by the Contractor shall conform jointly with the United States Environmental Protection Agency (EPA) and to the North Carolina agency governing their use. Labels and material safety data sheets for each pesticide intended to be used shall be submitted to the Contracting Officer's for approval prior to contract start date. Any proposed changes in approved pesticide usage shall be submitted for CO approval at least five (5) working days in advance of the anticipated use. Approvals may be limited to specific sites or pests.

5.8.4.2. Pesticide Label Conformance. All pesticide usage shall be in strict conformance with label directions, "The Label is the Law".

5.8.4.3. Pesticide Label Book. The Contractor shall maintain a label book, see TE-4, including Material Safety Data Sheets (MSDS) of pesticides used, and shall have the book readily available for the CO's inspection at all times. The Contractor may make additions to the label book by requesting approval in writing to the CO.

5.8.4.4. Pesticide General Safety. The Contractor shall mix (any mining occurring on the terminal will be a site designated by the CO) and apply all pesticides in strict accordance with pesticide label instructions and in accordance with AR 200-5. The Contractor shall also have available at each application operation with the certified controller, a current copy of the label and Material Safety Data Sheet (MSDS) for each pesticide used. Mixing of pesticides shall be accomplished to prevent spills or uncontrolled releases into the environment. Mixing of liquids should be conducted over a containment system capable of collecting 100% of all contents. Pest controllers shall be thoroughly trained in pesticide first aid as required by AR 200-5. The Contractor shall have on hand at all times for control of spillage, the following:

5 ea. 50 lb. Bag Absorbent Material (enough to absorb 5 gallons of free liquid).
5 ea. 100 lb. Bags Dehydrated Lime.
2 ea. 55 Gal. Recovery Drums.

5.8.4.4.1. Pesticide Spills. All spills shall be cleaned, decontaminated, and reported as specified by the AR 200-1; Armed Forces Pest Management Board Pesticide Spill Prevention; Management Manual, TIM No. 15; MOTSU, MOTSU Installation Spill Contingency Plan (ISCP), and MOTSU, Spill Prevention, Control and Countermeasure Plan (SPCCP).

5.8.4.4.2. Pesticide Spill Notification. Contractor shall immediately notify the CO and PW Environmental Office of any spill, indicating location, chemical product and size. The Contractor shall contain and initiate cleanup procedures as directed by the CO. Follow-up notification shall be given to the Contracting Officer, PW Environmental Office, and MOTSU Fire Dept. upon completion of clean up. The Contractor shall adhere to AR 200-1, Environmental Protection and Enhancement; and MOTSU's ISCP, and SPCCP.

5.8.4.4.3. Pesticide Spill Clean-up and Documentation. The Contractor shall decontaminate, clean up, and dispose of all spill residues and associated clean up materials IAW local laws, and with label and other published directives pertaining to the specific pesticides. A report will be given to CO listing all actions taken at spill site.

5.8.4.4.4. Pesticide Equipment. The Contractor shall provide employees with protection against safety and health hazards by furnishing them with all the protective equipment needed. Procedures for the provision of protective clothing and equipment shall comply with CFR 1910 and USEPA Regulation 40 CFR. Such equipment shall be approved for the use intended by the National Institute of Occupational Safety and Health or the American National Standards Institute (ANSI). Areas that require the wearing of protective clothing or where protective equipment if

necessary, shall be identified by the Contractor to employees during training and by the use of adequate signs. A program to clean, sterilize, and store personal protective equipment shall be implemented.

5.8.4.5. Pesticide Materials and Debris Disposal. Debris, rubbish, hazardous waste and non-usable materials resulting from contract work shall be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA), and all other applicable Federal, State and local laws and regulations, at no additional expense to the Government. Disposal by the Contractor shall be off the installation.

5.8.4.6. Pesticide and Equipment Security. All pesticides and dispersal equipment shall be secured in a locked vehicle, or shall be under the immediate and direct control of the Contractor at all times while on the installation. All pesticide and dispersal equipment including bait stations and traps shall be clearly marked with "DANGER – CONTAMINATED WITH PESTICIDES", or as required by applicable regulations, and shall include the name and concentration of the pesticide. The use of bait stations and trays shall be IAW TM 5-632, Military Entomology Operational Handbook.

NO PESTICIDES OR PESTICIDE DISPOSAL EQUIPMENT AND/OR VEHICLES SHALL BE STORED OR KEPT OVERNIGHT AT THE INSTALLATION.

5.8.4.7. Pesticide Waste. The Contractor shall use all usable end-of-the-day pesticide waste, rinse water, and residue as diluents for the next workday.

5.8.4.8. Pesticide Application Safety. The Contractor shall follow all present and future regulations on pesticide application safety and adhere to the following safety procedures when treating the interior of buildings.

5.8.4.8.1. Calibration and Use of Ultra-Low Volume (ULV). ULV equipment shall be calibrated to assure proper flow rate and droplet size analysis of pesticide as required by the label. ULV equipment shall be calibrated prior to contract startup and thereafter every fifty- (50) hours of use (or per manufacturer's recommendations), or when the machine is repaired. Calibration and droplet analysis reports shall be maintained on file and submitted with the monthly invoice.

5.8.4.8.2. Fog Application Approval. The Contractor shall not perform fog application in buildings without prior approval from the Contracting Officer or his designated representative. The Contractor shall submit a written request for approval to the CO or his designated representative at least five (5) workdays prior to performance of any proposed spray treatment. The request shall include the building number, pesticides to be used, method of application; precautions to be taken to ensure tenant and contract employee's safety, and steps to be taken to ensure the containment of the spray to the site application. The Contracting Officer or his designated representative will render a decision regarding the treatment within twenty-four (24) hours of receipt of the Contractor's written request.

5.8.4.8.3. Area Properly Secured for ULV Treatment. When ULV applications are used, the Contractor shall properly secure the space to be treated, and shall post a sign on each outside door warning against entry without proper protection. The Contractor shall notify the CO and the MOTSU Fire Department at least four (4) hours in advance of ULV application.

5.8.4.9. Pesticide Residual.

5.8.4.9.1. Liquid Spray Use In Buildings. Application of liquid sprays in buildings is a last resort. The Contractor shall coordinate with the building occupants so that arrangements can be made to move furniture and make preparation prior to the arrival of the Contractor. Occupants are responsible for removing shelf paper, food, and other items from cabinets and closets prior to treatment. If the area is not properly prepared, the Contractor shall not perform the scheduled service and immediately report the circumstances to the CO. The Contractor shall minimize the use of liquid pesticide application whenever possible.

5.8.4.9.2. Pesticide Ingestion. The Contractor shall take particular care to ensure that food, water, or other substances subject to ingestion by humans and/or pets are not contaminated by pesticides. If utensils, work surfaces, or machines used to prepare or dispense foods are inadvertently contaminated, the Contractor shall notify the CO,

and then clean and dispose of the item. The Contractor shall provide a written notice, which explains to the building occupants of the necessity for cleaning food-contact surfaces after pesticide application.

5.8.4.9.3. Pesticide Toxicity. The Contractor shall apply pesticide in such a manner as to prevent toxic exposure of personnel, pets, wildlife, ornamental plants, wetlands, and any other non-targeted components of the environment.

5.8.4.9.4. Pesticide Runoff. The Contractor shall NOT apply pesticide outdoors if rain is forecasted within twenty-four (24) hours, while runoff is occurring, nor within fifty- (50) feet of any wetland habitat or wells, which provides potable water. The Contractor shall have onsite a copy of each label for each pesticide being used. The Contractor shall take care to ensure that toxicants do not run off on surface flow or contaminate a ditch, culvert, drainage system or standing body of water.

5.8.4.9.5. Rodenticides. Rodenticides shall be placed in tamper-proof; covered bait stations except when placed in traps or located in places inaccessible to humans or pets. Inaccessible means that effort must be exerted to move equipment or furniture to expose the bait or its container. Outdoor bait stations shall contain only bait blocks, secured off the floor of the trap.

5.8.5. Pest Management Overview. The Contractor shall provide all necessary pest control services and ensure that services are performed in an efficient, safe, and effective manner. The services include inspections, pest surveillance, application of pesticides, trapping and removal of live animals, and removal of carcasses. Common nuisance and medically important anthropoida disease bearing) pest include, but are not limited to, roaches, ants, silverfish, bed bugs, fleas, crickets, carpet beetles, stored products' pest, fire ants, spiders, mites,(including bird mites), bees, wasps, centipedes, millipedes, psocids (book lice), bird lice, cloth moths, earwigs, drain flies (psychodas), flies, scorpion spring tails, termites, ticks, chiggers, rats, mice, moles, snakes, birds, feral cats, dogs, deer, raccoon, and other vertebrate pests, mosquitoes, grub worms, sod-web worms, May beetles, bag worms, scale insects, aphids, miscellaneous phytophagous beetles, true bugs, slugs, snails, Japanese beetles, lace bugs, tent caterpillars, fall-web-worms, lepidopterous larvae, spider mites, leaf miners, mealy bugs, scales, and Southern Pine Beetles. Vegetation shall be controlled as specified in Sections 5.8.5.3, 5.8.6.3, and 5.8.6.4.

5.8.5.1. Integrated Pest Management Plan (IPMP). The Contractor shall submit to the Contracting Officer, for approval, an IPMP for all work prior to contract startup, see
TE-4. The Contracting Officer or his designated representative will render a decision regarding the plan's acceptability. If aspects of the Plan are incomplete or unacceptable, the Contractor shall have five (5) working days to submit revisions to the plan.

5.8.5.1.1. IPMP Methods of Control. Proposed methods of control including Labels and Material Safety Data Sheets (MSDS) for all pesticides to be used shall be submitted. A list of brand names of rodent bait boxes, insect and rodent trapping devices, pest monitoring devices, and any other control devices or equipment shall also be included as part of the Integrated Pest Management Plan.

5.8.5.1.2. IPMP Service Schedule. A service schedule for each item of work outlining the Integrated Pest Management shall be submitted as part of the Plan. The Contractor shall arrange his work so as to minimize interference with normal conduct of Government business and shall coordinate work and cooperate with building occupants. It shall be the Contractor's responsibility to obtain access to buildings and facilities and arrange for them to be opened and closed. In no event shall the Contractor change the work schedule without prior notification to the CO.

5.8.5.2. Records and Reports Maintenance. The Contractor shall maintain complete records and reports as specified in the following paragraphs and TE-4.

5.8.5.2.1. DD Form 1532-1. The Contractor shall maintain daily, as work occurs, the Pest Management Maintenance Record (DD 1532-1) and retain it as a shop record during the term of the contract. The Contractor may use a similar form if approved by the Contracting Officer or his designated representative.

5.8.5.2.2. DD Form 1532. The Contractor shall summarize all pest control operations for the previous month, on the Pest Management Report (DD 1532). Information for the summary shall be obtained from the DD Form 1532-1.

The Contractor shall submit the report to the CO fifth (5) working day of the following month. The Contractor may use a similar form if approved the Contracting Officer or his designated representative.

5.8.5.2.3. DD Form 1070. The Contractor shall maintain and submit, to the CO within five (5) working days from date of inspection an accurate and complete written Termite and Woody Decay Inspection report (DD 1070), with graph or description of location, nature, and extent of wood-destroying pest. The Contractor may use a similar form if approved the Contracting Officer or his designated representative.
5.8.5.3. Level, l Preventive Maintenance (PM) Services Non-Vegetative and Vegetative.

5.8.5.3.1. PM Operations. The Contractor shall be responsible for meeting all Preventive Maintenance pest control requirements stipulated under this contract IAW approved IPMP. Service Orders will not be issued for PM work.

5.8.5.4. Level ll, Service Order (SO) Services Non-Vegetative and Vegetative.

5.8.5.4.1. SO Operations. The Contractor shall provide surveillance/inspection and pest control services on a Service Order basis, in buildings, around the exterior of all buildings and facilities, adjacent exterior areas, and areas of buildings not covered by scheduled Preventive Maintenance services. Such SO task include, but are not limited to, the control of cockroaches, ants, filth flies, spiders, ticks, scorpions, fleas, bees and wasps, earwigs, ground beetles, and other crawling insects; mice and rats; birds; and snakes. All requirements, standards, and controls cited, under this contract which are applicable to PM Level l task remains applicable to all SO Level ll task unless otherwise stipulated. IPM practices shall be used to treat areas specified on the Service Order.

5.8.6. Non-Vegetative and Vegetative Control.

5.8.6.1. Level I, Non-Vegetative Preventive Maintenance (PM) Tasks and Standards.

5.8.6.1.1. Schedule, Frequency, and Control of Pesticide Preventive Maintenance. The Contractor shall provide non-vegetative pest control services on a scheduled basis for the PM control of cockroaches, ants, fire ants, silverfish, chiggers, venomous arthropods, spiders, mice, rats, snails and other crawling and flying pests. Services shall be provided at the location(s)/site(s) specified in the related Technical Exhibits. When infestations are found the Contractor shall employ Integrated Pest Management (IPM) techniques. The Contractor will perform preventative methods such as vacuuming, power washing, caulking, screening, or other exclusion or harborage elimination procedures; or by trapping, pesticidal bait application, before applying minimal application of the least toxic pesticides and formulations. Liquid, dusts and aerosol pesticide formulation methods will only be used if other control methods have failed. Perform follow up inspections and, if necessary, repeat IPM measures until the acceptable level of control specified below is achieved and maintained, at no additional cost to the Government as stated below.

5.8.6.1.2. Arthropoda Control. Elimination of most arthropoda, other than cockroaches and ants, shall be established in one (1) visit.

5.8.6.1.2.1. Arthropoda Acceptable Level of Control. Control is defined as no live fleas within ninety- (90) days following treatment. Re-treatments shall be accomplished at no additional cost to the Government.

5.8.6.1.3. Other Arthropoda (silverfish, spiders, and crickets). Control shall be achieved within two (2) services.

5.8.6.1.3.1. Other Arthropoda Acceptable Level of Control. Control is defined as less than two sightings of the target pest during a thirty- (30) calendar day period.

5.8.6.1.4. Venomous Arthropoda Control. Venomous anthropoids (bees, wasps, hornets, spiders, and other biting, stinging and urticating/viscating arthropods) shall be controlled with residential insecticides in and around, transportable garbage containers, recreational areas such as picnic grounds, and other areas as required. Honeybees will only be destroyed after all other methods of removal have failed. The Contractor shall attempt to provide an acceptable alternative for their removal, if practical.

5.8.6.1.4.1. Venomous Arthropoda Acceptable Level of Control. No healthy, live pests shall be observed within the treated area thirty- (30) calendar days after of treatment. If live, healthy pest are observed any time within five (5) days after treatment, the Contractor shall perform the necessary treatment(s) at no additional cost to the Government.

5.8.6.1.5. Ant Control (other than those separately specified below). Ant control shall be established within thirty- (30) calendar days after the start date of the contract.

5.8.6.1.5.1. Ant Acceptable Level of Control (other than those specified below). Control is defined as keeping areas virtually free of any infestation for the duration of the contract. If the Contractor locates an infestation during a scheduled inspection/treatment, and a follow-up inspection/treatment is required to ensure that control has been obtained, the follow-up service shall be scheduled and the schedule provided to the CO.

5.8.6.1.6. Carpenter Ant Control. Carpenter ant infestations inside buildings or structures shall be controlled. Baits and dusts are the preferred controls. Drilling through structural materials to inject pesticides shall not be done without prior approval of the Contracting Officer. Drill holes shall be permanently filled and finished with an aesthetically pleasing appearance.

5.8.6.1.6.1. Carpenter Ant Acceptable Level of Control. The Contractor shall control indoor infestations of carpenter ants using the preferred control methods of baits and dusts. Once treatment has started, no live carpenter ants should be seen after five (5) days. Area should remain free of ants for ninety- (90) days.

5.8.6.1.7. Fire Ant Control. The Contractor shall provide fire ant surveillance and control in the MOTSU administrative area and at the Fort Johnston housing area and within thirty (30) feet of any hardstand area, truck parking area, around or on wharfs, all work sites, buildings, or other grounds as necessary, work site, building, and other grounds as necessary. The Contractor shall be required to utilize the broadcasting treatment procedures to provide for better coverage in the treated areas. Treatment shall be done once in the spring and again once in the fall. Early broadcasting shall be performed in all of the areas mentioned above.

5.8.6.1.7.2. Fire Ant Acceptable Level of Control. Control is defined as; when using aerosol, no live ants within three (3) days following treatment; when using granular, no live ants within thirty (30) day following treatment. Re-treatment in less than the time stipulated above shall be at no additional cost to the Government.

5.8.6.1.8. Cockroach Control. Elimination of cockroaches shall be established within thirty- (30) calendar days after the start date of the contract. The site, building, or area shall remain free of any infestation for at least an additional thirty- (30) calendar days. In buildings scheduled for monthly service, cockroach control shall be consistently maintained.

5.8.6.1.8.1. Cockroach Acceptable Level of Control. Control is defined as two (2) or fewer infestations (in an area of 2 square feet) in any one building, and no more than six (6) spot cockroaches found in any one spot. If more than two (2) spot infestations are found or more than six (6) cockroaches are found in any one spot, a call back request will be issued by the CO at no additional cost to the Government.

5.8.6.1.9. Mosquito Control. Monitoring for Mosquito larva and adults will normally start on the 1 April and extend through 31 October, for purposes of mosquito control this time period will be referred to as the breeding season. The monitoring sites are indicated on the installation map in TE-3 and listed TE-28.

5.8.6.1.9.1. Mosquito Larval Control. Perform and log larval surveys on Tuesday and Wednesday of each week throughout the breeding season at each of the sites specified in Technical Exhibits. Larval stations may be tree holes, barrels, containers, ponds, spoil dikes, ditches, or any other type of water collector. When larval counts reach the critical levels of four (4) larval per dip, the Contractor shall in-act the following controls within twenty-four (24) hours. Apply to the infested waters a larvacide that activates for a minimum of thirty- (30) days. Concentrating in the hatching areas the Contractor shall make larval treatment more advantageous by constructing/maintaining ditches in the three (3) dredge spoil sites. Should the West Nile Virus be identified in mosquitoes or birds on the terminal the Contractor shall be notified by the CO to commence operations at stage three- (3) and shall continue at this level until further notification by the CO.

5.8.6.1.9.1.1. Existing Ditch Mosquito Larval Control. Treat existing ditches, including those located in dike 1, 2, and 4, (not to exceed 5 miles annually) shall be maintained yearly. Larval control shall be through larvacide and/or pupicide applications. Application will be in accordance with product label rate. Significant larva control shall occur within forty-eight (48) hours. Treatment shall continue through the last brood of the season according to label effect levels

5.8.6.1.9.1.2. New Ditch Misquote Larval Control, Excluding Dikes. New ditches will be constructed in the dikes so as to allow free flow of water, (not to exceed 1/2 mile in length annually, twenty (20) inches deep and twenty-four (24) inches wide). Small areas that are holding surface water after heavy rains should be ditched to allow for water run-off. Ditching should be constructed to allow for water to flow towards outlet pipe. Ditches to be maintained to insure any trapped water is not a mosquito-breeding site. CO is to be advised prior to any ditching operation.

5.8.6.1.9.1.3. New Ditch Mosquito Larval Control, in Dikes. The Contractor shall construct new ditches once fresh dredge spoil has been pumped into dikes. After the dredging has ceased, the spoil settles, and the top starting to crust (approx 1 yr.) new ditch construction will start (provided no new spoil to be added within fourteen (14) months of last spoil addition). Ditches will be cut forty (40) yards apart and fixed to drain toward the drop pipe, not to exceed five (5) miles annually – twenty (20) inches deep and twenty-four (24) inches wide. Ditches are to concentrate water and cut treatment acres.

5.8.6.1.9.1.4. Mosquito Larva Acceptable Level of Control. Control shall be considered as established when the treated sites produce less that four (4) larva per dip for thirty- (30) days after treatment. Inspections shall occur during regular monitoring days. When re-treatment is required in less than the time stated above it shall be at no additional cost to the Government.

5.8.6.1.9.2. Adult Mosquito Control (fogging). The Contractor shall provide adult mosquito surveillance and control throughout the breeding season at the sites indicated on the installation map in TE-3 and listed TE-28. When critical population levels identified in the table below are detected the Contractor shall initiate adulticizing operations (fogging) to keep the populations at or below Critical Levels One (1).

5.8.6.1.9.2.1. Adult Monitoring and Trapping. Black cups with red strips will be set to attract adult Tiger Mosquito's in order to gather eggs. West Nile Virus traps and New Jersey Light Traps will be used to monitor adult mosquitoes. The monitoring will be conducted a minimum of two (2) times per week, and will be done on Tuesday and Wednesday's. Data from each of these monitoring will be recorded and certain specimens prepared for mailing each Thursday by 1:00 p.m. Mailing will be done through the Public Works department. The CO will be given a hand written report of mosquito count per trap per night by 2:00 p.m. each monitoring day. When the number of adult mosquitoes caught in a New Jersey Light Trap (per one night operation) reaches the first Critical Level listed in the table below, the Contractor under the direction of the CO shall start his adulticizing operation within twenty-four (24) hours.

5.8.6.1.9.2.2. Adult Mosquito Acceptable Level of Control. Once the fogging operation has begun in Stage one (1), the Contractor shall continue on a regular schedule until the surveillance count falls beneath the Critical Level Stage One (1). Two (2) consecutive counts less than Critical Level Stage One (1) shall constitute achievement of Adequate Control. Once fogging has started in stage three (3), the Contractor shall continue on this schedule until requirements in 5.8.6.1.9.2.

Stages and Frequency of Adulticizing Treatment (Fogging)

Stage 1*** Critical Level 12* Mosquitoes	**Stage 2***** Critical Level 20* Mosquitoes	**Stage 3***** Critical Level 25+* Mosquitoes
Fogging **will be done mornings: Monday, Wednesday, Friday.	Fogging** will be increased to five (5) days a week, mornings. This will include Saturday and Sunday during ship loading operation.	Fogging** will increase to five (5) mornings and evenings. This will include Saturdays and Sundays during ship loading operation Once Stage 3 fogging begins, it will continue until requirement in 5.8.6.1.9.2. Should West Nile Virus be identified in mosquitoes or birds on the terminal, fogging operations will be Stage 3. The CO will advise Contractor of the beginning and the cut off dates.

* Number reached of adult mosquitoes

** Treatment frequency to start 24 hours of reaching stage levels.

*** Survey Method, Light Trap

5.8.6.1.9.3. West Nile Virus Bird Surveillance. The Contractor's work crew will, during their normal workday, be observant for dieing and/or dead birds. Particular notice should be given to Crows, Blue Jays, Hawks, Eagles, and Owls, etc. If any of these birds are found repot immediately to the Contractor office the location, species and quantity. The Contractor will in turn notify the CO. When the Contractor is instructed by the CO care will be initiated in the proper handling, storage and transporting of the specimen to the proper authorities. The Contractor will be responsible for getting the birds to the proper authorities with appropriate documentation. A positive report of a diseased bird will be reported immediately to the CO. Under certain conditions birds may not have to be submitted for testing, however records will still need to be filled out on each dead bird, and turned into the CO at the end of each week, see TE-4.

5.8.6.1.9.3.1. West Nile Virus Bird Acceptable Level of Control. Birds are only an indicator of virus's presents. Numbers of dead birds are recorded for data information purposes. Should West Nile Virus be identified in mosquitoes or birds on the terminal, fogging operations will be Stage 3. The CO will advise Contractor of the beginning and the cut off dates.

5.8.6.1.10. Nuisance Birds Control. Control shall be established within thirty- (30) calendar days after treatment. Control shall consist of preventing nuisance birds from nesting, roosting, or loafing on exterior and interior surfaces of buildings and structures. Nuisance birds are normally pigeons, starlings, and house sparrows. The Contractor shall remove nests (including contents) and control ectoparasites such as ticks, mites, and lice, when present. Protected migratory birds (Barn Swallows, Owls, Hawks, etc.), which periodically occur on the installation, cannot be controlled without a permit. No Protected species and their nests shall be touched or harmed without prior written consent of the Contracting Officer and obtaining required permits. Care should be taken not to disturb the habitat of the Red Cockaded Woodpecker. Bird management programs may include trapping, physical removal, non-lethal repellents, physical barriers, operation of pyrotechnic and scare devices, and toxic baits. Dead and dying birds resulting from the control program shall be disposed of in "deer remains pit" on the installation. Control shall be established within thirty- (30) calendar days after the contract start date, and maintained for the duration of the contract.

5.8.6.1.10.1. Operation of Pyrotechnic and/or Scare Devices. The Contractor shall obtain written consent, and have it on sited during use, from the CO prior to using repelling devices for dispensing birds.

5.8.6.1.10.2. Nuisance Bird Acceptable Level of Control. Control is defined as no more than five (5) pigeons and no more than eight (8) birds total (all nuisance species combined) sighted, nesting or roosting, in a building or structure.

5.8.6.1.11. Rodent Control. Rodent infestations shall be eliminated within a thirty- (30) calendar day service period. The use of glue boards, snap traps, and other non-poisonous control methods shall be emphasized. Rodenticides shall be placed only, after notification of the CO, in distinctly marked, spill-proof, tamper-proof bait stations, which are inaccessible to children, pets, and non-target wildlife, or in burrows, which shall be closed immediately after treatment. Bait stations shall remain free of insect infestation and shall not be placed in food service or food preparation areas without the prior written acceptance of the CO. Control shall be established within thirty (30) calendar days after the start date of the contract. Control is defined as keeping areas free of infestation for the duration of the contract. Physical signs of rodent activity, such as active burrows, droppings, urine stains, commodity damage, etc., shall be evidence of lack of control. When noxious odors indicate the presence of a dead rodent resulting from Contractor operations, locate, remove, and dispose of the carcass in "deer remains pit" on the installation. If the carcass is located in an inaccessible area, apply an effective deodorizer.

5.8.6.1.11.1. Rodent Acceptable Level of Control. The site, building, or area shall remain rodent-free for at least an additional thirty- (30) calendar days.

5.8.6.1.12. Snail Control. The Contractor will provide snail control services at Ammo Pads, Hardstands, Dike 4, and other select storage areas depicted in TE-3 and listed on TE-21b. All sites will be treated each year at the beginning of the baiting program, starting in mid April, unless otherwise noted on TE-21b. High risk snail areas will receive additional treatments as noted below. Snail control is a two-step process) and will consist of; first, mollusicide bait will be spread around these areas, twelve (12) feet out from the hard-surface stand. Second (multi-treated 5.8.5.3.7, within five- (5) working days following bait, a herbiciding vegetation for a bare ground affect twenty-four (24) inches from edge of hard-surface stand. Baiting will be applied with a cyclone type machine, which can be calibrated to different rates per acre. Bait will be scattered over the treated site at a minimum rate of no less than 20 pounds per acre. Machine will be calibrated at the beginning of each baiting cession. Surveillance will occur on these sites at later dates and if results indicate a snail build up or infestation described in 5.8.6.1.12.3. re-treatment will follow.

5.8.6.1.12.1. Snail Control at High-Risk Sites. After the initial treatment at the beginning of the bating program the Contractor shall continue, ever six (6) weeks to apply a twelve (12) foot wide mollusicide form edge of pavement at selected high-risk sites. High-risk sites specified in TE-3 and TE-21b are located at the 300 series Pads, Marl Pit, and Dike 4. An additional one (1) acre area surrounding Pad 328 is also in the high-risk category. The minimum treatment rate will be twenty (20) pounds per acre.

5.8.6.1.12.2. Shrub and Flowerbed Snail Control. Ornamentals and landscaped areas will be inspected for snail infestation and damage at the Terminal and Fort Johnston, during the months of May thru September. Three (3), one (1) foot square spots will be checked per bed. Findings will be documented and provided to the CO within five (5) working days upon compilation of inspection. If more than ten (10) snails are found per bed, the site will be treated with snail bait according to label rates.

5.8.6.1.12.3. Snail Acceptable Level of Control. Control shall consist of the absence of live snails attaching to cargo and/or equipment that has been stored on the hardstand surfaces, for periods of longer than one week. Control shall be established with-in each specific area thirty- (30) calendar days of first treatment

5.8.6.1.13. Structural Pest Control. The Contractor shall within ninety- (90) calendar days after the contract start date and annually thereafter, perform a termite inspection of the facilities identified in TE 27 and provide the results to the CO within five- (5) work days after the inspection was conducted. The average number of structures treated each year is one (1). The average area treated each year is two hundred fifty (250) square feet. This inspection shall also include non-subterranean form of termites, as well as other wood destroying insects.

5.8.6.1.13.1. Structural Pest Acceptable Level of Control. Control shall consist of absence of live insects, pitch tubes, material including active entrance holes scattered along wood surface.

5.8.6.1.14. Wood Destroying Fungi Control. The Contractor shall treat the infested surrounding area with an approved fungicide following label directions. It is important to treat the entire infested area; this would include all of the wood in a crawl space, wall or attic showing signs of damage.

5.8.6.1.14.1. Wood Destroying Fungi Acceptable Level of Control. Control shall consist of the absence of stains, wood decomposition and fruiting bodies within thirty- (30) days of treatment.

5.8.6.1.15. Ornamental and Turf Pest Control. The Contractor shall inspect ornamental vegetation and turf in the performance of grounds maintenance. When fungus, bacteria, or leaf sucking and chewing insects are noted on shrubs, lawns, and improved grounds the Contractor shall survey and provide control of the infestation.

5.8.6.1.15.1. Ornamental and Turf Acceptable Level of Control. Control shall consist of the absence of infestation within five (5) days of treatment.

5.8.6.2. Level lI, Non-Vegetative Service Order (SO) Task and Standards.

5.8.6.2.1. Schedule, Frequency and Control for Pesticide Service Orders. In addition to pest cited below, upon receipt of approved Service Orders the Contractor may be required to perform unscheduled services for those pests cited under Preventative Maintenance paragraph 5.8.6.1. All acceptable levels of control in PM work apply to SO work.

5.8.6.2.2. Structural Pest Control. The Contractor shall provide structural pest control services on an unscheduled basis. The Contractor shall perform an inspection of the building identified on the Service Order request. The findings of the inspection, including negative findings, shall be recorded on a commercial form that has information on it similar to the DD Form 1070. Completed reports shall be provided to the CO within five (5) working days following the completion of each service. Services shall be completed within thirty- (30) working days after receipt of the Service Order. At the time of any soil treatment application, the soil shall be in a condition with low moisture to allow uniform distribution of the treatment solution throughout the soil. The Contractor shall not apply pesticide during or immediately following heavy rains, or when conditions will cause runoff and create an environmental hazard. No pesticides shall be applied to the soil beneath a plenum air space. Pesticides shall not be applied until the approximate location of water and sewer lines are known in an effort to avoid damage to them during the treatment process. The Contractor shall deliver termiticides in sealed original containers.

5.8.6.2.2.1. Subterranean Termite Control. All termite infestations in the structure shall be controlled within thirty- (30) days of treatment. Labels shall bear the manufacturer's warnings to be observed in handling and use of material and bear evidence or registration under the Federal Insecticide, Fungicide and Rodenticides Act (FIFRA). Note: DOD prohibits treatment of buildings with sub/intra-slab HVAC ducts unless the ducts are sealed and new redirecting airflow away from the soil and slab.

5.8.6.2.2.2. Drill Sites for Sub-slab Injection and Soil Rodding. Termiticide shall be distributed evenly throughout the soil, extending to the top of all footings, including all exterior and interior walls with footings. Both sides of all basement walls with footings shall be treated. Spacing between injection points or rod holes shall not exceed twelve (12) inches, unless this directly violates label directions. If this is the case, the CO shall be notified prior to work performance.

5.8.6.2.2.3. Trench and Excavation Technique. Soil adjacent to outside walls, extending to the top of footings, shall be treated with a minimum of four- (4) gallons per ten (10) linear feet per foot of depth and applied in a strip not less than six- (6) inches wide, or per chemical instructions. One-third of the insecticide shall be applied in the bottom of the trench level with the top of the footings, one-third shall be applied when half of the backfill is placed, and the remainder when the trench is virtually filled. Backfill shall be tamped and sufficient in quantity to provide a surface sloping away from the structure. Where pavement abuts the building, treatment shall be applied to the sub-surface soil along the entire length of this junction. Holes shall extend to foundation footings, and be spaced not more than twelve- (12) inches apart through expansion joints or through slabs within six- (6) inches of the foundation wall.

Insecticide, not less than four- (4) gallons per ten- (10) linear feet per foot of depth, shall be applied through these holes.

5.8.6.2.2.4. Structural Pest Acceptable Level of Control. Control is defined as, no evidence of termites, pitch tubes of active entrances into treated structures during any scheduled or unscheduled inspections. Any infestation discovered will be treated and no additional cost to the Government.

5.8.6.2.3. Snail Control. The Contractor shall provide snail control service on an unscheduled basis, by conducting two (2) 10 % inspections of Pads and Hardstands for snail populations. During each inspection six (6) different Pads from the high-risk sites, paragraph 5.8.6.1.12.1, will be included in the inspection. The first inspection will be conducted within 30 days of the first baiting of the Pads; the 2nd inspection will be conducted two- (2) weeks after the 5th treatment. Each Pad (site) will be inspected at ten (10) random spots, scattered around the baited area using a 12"x12" square frame, to observe and count live snails. Separate records will be kept of each square counted by Pad numbers, and copies will be provided within five- (5) workings day of inspection to the CO. If data indicates that the snail population is high, the CO may increase the poundage rate per acre. Two- (2) days prior to the inspection a list will be provided to the CO.

5.8.6.2.3.1. Snail Infested Arriving Cargo Control. The Contractor, when notified by the CO that snail infested cargo is being placed at a specific Pad, will act to isolate this cargo. The Contractor will accomplish this by encircling cargo with a small mound of rock salt. Contractor shall monitor the situation daily, until the cargo is moved to insure a solid salt mound is maintained around the cargo.

5.8.6.2.3.2. Snail Infested Cargo Acceptable Level of Control. Control is defined as, all snails are contained within salt barrier while cargo is on Pad. Fumigation of snails on containers will be handled by CO and is not the responsibility of the Contractor.

5.8.6.2.4. Miscellaneous Service Order Non-Vegetative Control. The Contractor shall provide miscellaneous unscheduled pest control services in accordance with the following requirements. Unless specified otherwise, services shall be provided within twenty-four (24) hours of receipt of the service order.

5.8.6.2.4.1. Animal Control. Provide pest control services for the removal from the installation, wild and feral animals, including, but not limited to, beavers, skunks, opossums, squirrels, raccoons, alligators, snakes, feral dogs, cats, and bats. The Contractor shall use cage-type live traps or other techniques that do not harm the captured animal. All procedures used shall be IAW the IPMP. Leg-hold steel traps shall not be used. However, under CO approval Conibear Body Trap may be used to catch beavers. All captured feral domestic cats shall be taken to Brunswick County Animal Control, HWY 211, (910) 754-8204. During non-duty hours the Contractor shall hold animal until next day regular hours for animal control. Other animals shall be returned to the wild (except as regulated by state and county law, i.e. beavers) away from human habitation. Animal control operations shall be completed within thirty- (30) days of when operations were started.

5.8.6.2.4.2. Trapping and Live Animals Disposal. Trapping shall be accomplished in accordance with permit and regulations obtained from the NC Dept. of Natural Resources. Beavers shall be disposed of in accordance with the State game laws. The Contractor shall dispose of the trapped domestic type animals (dogs and cats) through the Brunswick County Animal Shelter or by notifying the owners if animals are identified with collars.

5.8.6.2.4.3. Beaver Dams or other Animal Placed Materials. Materials blocking waterways or culverts shall be destroyed and debris removed from the site. The estimated time for varmint control is one hundred forty (140) man-hours per year.

5.8.6.2.4.4. Control of Animals Suspected of Being Rabid. The Contractor shall notify the CO, within one- (1) hour, regarding any animals suspected of having rabies. The CO will direct on procedures that will be followed to handle each specific situation.

5.8.6.2.4.5. Carcass Disposal. The Contractor shall remove all dead birds, reptiles, and animals disposing of the carcasses in the "deer disposal pit" on the installation, as directed by the CO. The recovery and disposal shall be made within twelve- (12) hours after notification of the presence of dead or dying animals. When noxious odors

indicate the presence of dead rodents or other animals in inaccessible areas the Contractor shall locate and remove the carcass and/or apply an effective deodorizer.

5.8.6.2.4.6. Noxious Odors. When odors indicate the presence of a dead rodent or other animal, locate and remove the carcass. If a carcass is located in an inaccessible area, apply an effective deodorizer.

5.8.6.2.4.7. Emergency Work. Emergency services include control of poisonous or venomous insects or reptiles posing an immediate danger or threat to persons, removal of swarming bees or wasps in housing or administrative areas, and other services of this nature. For those requests involving a present danger, service shall be rendered within one (1) hour.

5.8.6.2.4.7.1. Emergency Request. Based upon prior experience, pest control services were required for approximately twelve (12) emergency requests per year.

5.8.6.2.4.8. Aerial Spray Support. When aerial spray operations utilizing military aircraft must be initiated, the Contractor shall be responsible for providing the ground support for aerial spray operations consisting of storing, transporting, loading, and unloading Government owned pesticides, diluents, and solvents for the aircraft at the Wilmington or Brunswick County Airports.

5.8.6.2.4.9. Special Events. The Contractor shall spray insecticide for control of insects prior to special events when issued a Service Order This may occur at the rate of twelve- (12) times a year.

5.8.6.3. Level I, Vegetation Preventive Maintenance (PM) Task and Standards.

5.8.6.3.1. Schedule, Frequency, and Control of Pesticide Preventive Maintenance. The Contactor shall provide vegetative pest management services on a scheduled basis for the PM control of undesirable vegetation including woody, grassy and aquatic. Services shall be provided at the location(s)/site(s) specified in TE-3, TE 21, TE-21a, and TE-21b. Weed control services shall be provided by using herbicides with low per acre rates of application or non-chemical methods. Non-selective soil residual herbicides shall not be used within seventy-five (75) feet of the drip line of large trees, within root range of shrubs and small trees, or within ten (10) feet of flowers and gardens. The Contractor shall take care so that vegetation in areas adjacent to treated areas is not damaged. The Contractor shall repair any damage caused by herbicide treatment at no additional cost to the Government.

5.8.6.3.2. Rail Related Soil Sterilization Requirement. The Contractor shall eradicate all vegetation on railroad beds, around switch stands, signs posts, signal stands, electrical substations, rail storage site, and chain link fences with a United States Environmental Protection Agency (USEPA) approved soil sterilant. Treating required in paragraphs 5.8.6.3.2.1. through 5.8.6.3.2.2.1. shall be completed annually between
1 March and 30 May.

5.8.6.3.2.1. Railroad Bed Trackage Sterilization. One-half of the railroad bed trackage system (48 miles per year as defined by the CO) shall be treated annually with soil sterilization. The treatment shall extend eighteen (18) inches beyond each end of the ties.

5.8.6.3.2.1.1. Rail Bed Sterilization Acceptable Level of Control. For a twelve (12) month period after application of the herbicide, ninety-five (95) percent of the area within forty-eight (48) inches on both sides of centerline of the track shall be void of any vegetative growth. If the area contains vegetation during the twelve- (12) month period, the Contractor shall retreat the area at no additional cost to the Government.

5.8.6.3.2.2. Other Railroad Related Soil Sterilization Areas. Switch stands, sign posts, gate opening, and crossing signals shall be kept clear of vegetation out to a distance of three (3) feet from the structure and shall be treated with a soil sterilization annually.

5.8.6.3.2.2.1. Other Railroad Related Sterilization Acceptable Level of Control. For a twelve- (12) month period after application of the herbicide, ninety-five (95) percent of the area within three- (3) feet of the switch stands; signposts, and crossing signals shall be void of any non-woody broadleaf and grass plants. If more than five (5)

percent of the area contains live vegetation during the twelve- (12) month period. The Contractor shall retreat the area at no additional cost to the Government.

5.8.6.3.3. Railroad Right-of-Way Woody Vegetation Control. The growth of woody vegetation along the railroad right-of-way shall be controlled through use of a selective type herbicide. Treatment shall begin at the base of the ballast and extend thirty- (30) feet from the centerline of the tracks on each side of the rails forty-eight (48) miles, as defined by the CO, of the trackage system to be treated per year. Treating to be completed between 1 April and 15 June.

5.8.6.3.3.1. Rail Right-of-Way Vegetation Acceptable Level of Control. For a twelve (12) month period after application of the herbicide, ninety-five (95) percent of the area within thirty- (30) feet on each side from the centerline of the tracks shall be void of any woody vegetation. If more than five- (5) percent of the area contains woody vegetation during the twelve (12) month period, the Contractor shall retreat the area at no additional cost to the Government.

5.8.6.3.4. Sterilization Fence Treatment. The Contractor shall apply soil sterilization on twenty (20) miles of chain link fencing annually as identified by an asterisk in TE-3 and TE-21a. The fencing shall have an eight (8) inch vegetation free strip along each side of the wire.

5.8.6.3.4.1. Sterilization Fence Treatment Acceptable Level of Control. For a twelve (12) month period after application of the herbicide, ninety-five (95) percent of the area within three- (3) feet of the switch stands; signposts, and crossing signals shall be void of any non-woody broadleaf and grass plants. If more than five- (5) percent of the area contains live vegetation during the twelve- (12) month period. The Contractor shall retreat the area at no additional cost to the Government.

5.8.6.3.5. Interchange Yard Fence - Selective Herbicide to Include Woody Vegetation Control. At the interchange yard a selective herbicide shall be applied to eradicate all woody vegetation for a distance of eight (8) feet on the exterior side of 3.9 miles of fence and an additional one (1) foot on the interior side of the same 3.9 miles fence. This woody vegetation treatment shall also be applied to an eight (8) foot wide, 1.5 miles portion of the installation perimeter fence extending from the north entrance gate (River Road) to the north end of the North Wharf. After the CO determines the Contractor has achieved control of the woody vegetation, the spraying shall be performed on alternating (every-other) years. See TE-3 and TE 21a.

5.8.6.3.5.1. Interchange Yard Fence Selective Herbicide Acceptable Level of Control. For a seven- (7) month period after application of the herbicide, ninety-five (95) percent of the area within eight- (8) inches on each side of the fence shall be void of vegetative growth. If more than five- (5) percent of the area contains vegetation during the seven- (7) month period, the Contractor shall retreat the area at no additional cost to the Government.

5.8.6.3.6. Other Site-Specific Fence Locations – Selective Herbicide to Include Woody Vegetation Control. At pads 403, 407, and 408; security railroad track 165; installation perimeter fence, and TA's 1, 2, and 3 will require eight (8) foot strip 5,175 LF along the fence at chosen sites to be treated with a selective herbicide. See TE-3 and TE-21a for details.

5.8.6.3.6.1. Woody Vegetation Acceptable Level of Control. The treated vegetation will not be allowed to exceed twelve- (12) inches in height throughout the year. This chemical control mainly will be on earthen berms.

5.8.6.3.7. Pads, Hardstands, and Other Specified Site Sterilization Treatment. The Contractor shall provide a two (2) foot bare ground strip from the edge of pavement at all locations noted on TE-3 and TE21b. Multi-treated areas will be ***preceded*** by snail treatment specified under 5.8.6.1.12 and shown on TE-3.

5.8.6.3.7.1. Pad and Hardstand Sterilization Acceptable Level of Control. For a twelve (12) month period after application of the herbicide, ninety-five (95) percent of the area within three- (3) feet of the switch stands; signposts, and crossing signals shall be void of any non-woody broadleaf and grass plants. If more than five- (5) percent of the area contains live vegetation during the twelve- (12) month period. The Contractor shall retreat the area at no additional cost to the Government.

5.8.6.3.8. Site Specific Selective Herbicide for Grassy Vegetation Control.

5.8.6.3.8.1. Motion Sensors at 400 series Pads and Dike 4 Grassy Vegetation Control. The Contractor will apply herbicide to the all 400 series Pad areas to regulate grassy vegetative growth around and under motion sensors, year round. Treatment area shall be six (6) feet from the center of the beam outward; and is an average distance of two (2) feet from the center of the beam inward, or until it buts up to the sterilized/bare strip specified in paragraph 5.8.6.3.7 around each Pad. Due to erosion possibilities bare ground affect is not wanted.

5.8.6.3.8.1.1. Motion Sensors Vegetation Acceptable Level of Control. Vegetation will not be allowed to exceed six- (6) inches in height. If vegetation gets above six- (6) inches the Contractor will retreat at his expense.

5.8.6.3.8.2. Pavement Joint Control. A non-selective herbicide shall be applied to control vegetative growth in 20,000 LF of pavement expansion joints, and other cracks, crevices, etc. in streets, hardstands, wharves and parking lots.

5.8.6.3.8.2.1. Pavement Joint Acceptable Level of Control. For a seven- (7) month period after application of the herbicide, ninety-five (95) percent of the expansion pavement joints and other cracks/crevices shall be void of vegetative growth. If more than five- (5) percent of the area contains vegetation during the seven- (7) month period, the Contractor shall retreat the area at no additional cost to the Government.

5.8.6.3.8.3. Herbicide Edging Control. Assets within the Administrative Area and Family Housing shall have a three- (3) inch perimeter bare ground vegetative control strip; all other areas shall have a twelve- (12) inch border. Real property assets to receive treatment are; buildings/facilities listed on TE-27 with distance, frequency and width; utility poles (1,200 - 14 inch average diameter), lightning protection poles (435 - 14 inch average diameter), lightning protection ground rod vault (200 - 8 inch diameter), guardrails (6,336 LF), roadway and railway signposts (600 – 4 inch average diameter), electrical and phone distribution boxes (185 – 5.0 LF ea.), and reservoir at pump station #2 (1 - 210 LF), communication tower bases (3 – 70 LF ea.), and rural weather station (1 – 40 LF). This treatment shall be accomplished within ninety- (90) days after award of contract. Each year thereafter the treating of these sites shall be accomplished during the period of 15 April to 15 June. Improved grounds areas being mechanically edged IAW 5.6. shall NOT be treated under this section.
5.8.6.3.8.3.1. Herbicide Edging Acceptable Level of Control. Within thirty- (30) days of initial treatment all vegetation shall be eradicated and within sixty- (60) days bare ground shall be established. For a twelve- (12) month period after application of the herbicide, ninety-five (95) percent of each area, within above specified distance of facilities, shall be void of vegetative growth. If more than five- (5) percent of the area contains vegetation during the twelve- (12) month period the Contractor shall retreat the area at no additional cost to the Government.

5.8.6.3.8.4. Herbicide Ditch Control, Including Dikes. The Contractor shall herbicide fifteen- (15) land acres of ditch lines and other mosquito breeding sites, with an average width of fifteen- (15) feet with a chemical herbicide approved for use around water ditches.

5.8.6.3.8.4.1. Ditch Acceptable Level of Control. The water ditches shall be eighty (80) percent free of vegetation during the entire year for performance of proper surveillance and larvaciding. Vegetation shall be eradicated, as a minimum, three- (3) feet on the top of each side of the ditch bank.

5.8.6.3.8.5. Woodland Management. The Contractor shall chemically control hardwood and other undesirable growth in woodland management program for pine tree release and pine straw management. Control shall be accomplished on approximately eighty- (80) acres each year between February 1 and May 15. The Public Works Forester will approve the type of chemical and method of control. Control methods shall include foliage spraying, stem injection, or spot soil treatment using pellet or liquid.

5.8.6.3.8.5.1. Woodland Management Acceptable Level of Control. Fourteen (14) month period following foliage applications ninety- (90) percent of the treated hardwood vegetation shall be dead. Fourteen- (14) months following frilling, basal spraying, or ground spot applications seventy- (70) percent of the treated hardwood vegetation shall be dead. If more than ten- (10) percent of the area treated contains live hardwood or other local vegetation after the fourteen- (14) month period the Contractor shall retreat the area at no additional cost to the Government.

5.8.6.3.8.6. Aquatic Weed Control. Selective herbicides shall be used to control aquatic weed growth in wastewater lagoons (wastewater management) and fresh water ponds for fish management programs. The treatment period shall be from 1 March through 30 May annually. The Contractor shall determine treatment date IAW the type of growth to be controlled.

5.8.6.3.8.6.1. Wastewater Lagoon Aquatic Weed Control. Sixteen- (16) acre feet of wastewater lagoons (four- (4) surface acres with an average depth of four- (4) feet) shall be treated to control aquatic weeds.

5.8.6.3.8.6.2. Fresh Water Ponds. One hundred- (100) acre feet of fresh water ponds twenty- (20) surface acres with an average depth of five- (5) feet) shall be treated on an annual basis. Ponds to be treated will be designated by the CO.

5.8.6.3.8.6.3. Aquatic Weed Acceptable Level of Control. The wastewater lagoons and fresh water ponds shall be ninety-five (95) percent free of aquatic weeds at all times. If more than five (5) percent of the treated area contains vegetation during the twelve (12) month period following application, the Contractor shall retreat the area at no additional cost to the Government.

5.8.6.4. Level II, Vegetative Service Order (SO) Tasks and Standards.

5.8.6.4.1. Schedule, Frequency, and Control for Pesticide Service Orders. The Contractor shall perform Level II Service Order work as noted in Section 5.1.1.2. in accordance with commercial standards established for pest control management. Typical Service Order services include providing control of occasional or accidental invading or nuisance pests at the locations/site's throughout the terminal including ships docking at MOTSU.

5.9. WHARF MAINTENANCE.

5.9.1. General. The Contractor shall inspect, maintain, and repair the three (3) wharves, associated structures, and utilities serving the three (3) wharf areas.

5.9.2. System Overview. The wharf complex at MOTSU contains three (3) separate wharves fronting the west side of the Cape Fear River. The south wharf identified as facility No. 210 contains berths one, two, and three. The center wharf identified as facility No. 240 contains berths four, five and six. The north wharf identified as facility No. 280 contains berths seven, eight, and nine. All wharves are reinforced concrete construction supported by wood and reinforced concrete pilings and each has a fendering system designed to prevent structural damage to the wharf face by movement of ships alongside. The wharves have electricity, fresh water, fire fighting water, and sewage lines servicing each berth. Each wharf has two (2) smoke houses and a combination MHE charging station/stevedore office/shelter and electrical sub-station. The south wharf is the only wharf equipped with two modular container cranes (the container crane maintenance is not part of the contract).
5.9.2.1. Drawings. The wharves are shown in TE-3. Specific and detailed drawings are located in the Public Works Building, Building 4, at MOTSU.

5.9.3. Level I, Preventative Maintenance (PM) Tasks and Standards.

5.9.3.1. Annual Wharf Inspection. The Contractor shall perform a complete structural, mechanical and utility inspection of each wharf each year in June. This inspection shall include a visual inspection of the pilings (concrete and wood) and supports (especially broken or cracked piles and any spalling of concrete) above the waterline (at low tide) and the under deck conduit and piping for breaks and missing components. Also included in this report is the wharf fender system, to include fixed and floating fenders. All broken or pulled apart conduit and piping, and all missing components (to include all required supports) shall be repaired and/or replaced by the Contractor. This inspection report shall also include observations on conduit and equipment that has been abandoned in place, and recommendations for their removal. In addition to the written report, the Contractor shall provide pictures of all findings. These pictures shall consist of one hard copy of each shot and a CD (s) containing all pictures, in JPEG format. The Contractor shall inspect all handrails for structural integrity and preservation. The Contractor shall repair and paint any handrails requiring such maintenance. When rust is found on the steel handrails, they shall have all rust removed and then shall receive a metal primer coat of paint and one topcoat of paint. The paint shall match the existing color. Any repairs to the steel handrails shall be accomplished prior to painting. In addition, the

Contractor shall inspect and repair all wooden bumpers and interconnecting bolts, all steel bollards and cleats (to include connecting bolts, washers and nuts), wharf deck concrete expansion joints, electrical outlets, panels and disconnects, fire hose cabinets, and wooden steps. Corrosion from all metal shall be removed, all metal shall be primed and painted and all bolt/nut connections shall be made tight. The Contractor shall also inspect and repair the floating dock utilized by the Security Boats (located at the South Wharf) and the small boat dock and ramp "old boat dock" located at the south end of the Center Wharf. Repairs shall include replacement of broken/damaged boards, hardware and flotation devices.

5.9.3.2. Records and Reports. The Contractor shall maintain the following record and submit it to the CO at the time and in the formats specified in TE-4.

5.9.3.2.1. Annual Inspection Results.

5.9.4. Level ll, Service Order (SO) Tasks and Standards.

5.9.4.1. General. The Contractor shall perform Level ll, Service order work as specified in Section 5.1.1.2.

5.9.4.1.1. Emergency Repairs. The Contractor shall be available 24 hours per day, seven (7) days per week for emergency repairs. Typical emergency repairs include electrical outages, concrete patching where broken concrete affects access to the wharf or the movement of cargo to or from the wharf, marine welding where steel support for fender system have weather or corroded away, repairs to the wharf fendering system to prevent damage to a ships hull, further deterioration of the fender system, or damage to the wharf itself. Contractor shall anticipate that operation or a suitable size craft or skiff will be necessary to inspect the underside/water side of the wharfs and make maintenance repairs. The Contractor shall provide craft suitable enough to conduct these inspections.

5.9.4.1.2. Typical Tasks Performed. Typical unscheduled maintenance and repair tasks performed by the Contractor include repairing structural damage done by material handling equipment or other vehicles used in the on/off-loading of cargo at the wharf and structural repairs due to storm damage, accidents or other Acts of God. Other typical unscheduled maintenance includes, but is not limited to, repairs or replacements to steps, ramps and access ladders, repairs to expansion joints, repairs to wharf building components (both interior and exterior), wharf fender systems and defective or broken conduits and pipes.

6. APPLICABLE PUBLICATIONS AND FORMS.

6.1. Governing Directives. Directives and regulations relating to Preventive Maintenance are drawn from a number of sources, including Army regulations, pamphlets, and technical materials. Each source provides valuable guidance for developing a preventative maintenance plan. The Contractor is responsible for following all current and future subject related guidelines. The regulation list below is for information purposes only and is not to be interpreted as a comprehensive list of all governing documents. Some web sites have been included for referral.

6.1.1. Army Regulations (DA PAM 25-30). www.usapa.army.mil;
www.army.mil/usapa/index.html

NO.	DATE	TITLE
AR 11-27	2/3/97	Army Energy Program
AR 40-5	10/15/90	Preventive Medicine
AR 58-1	1/28/00	Management, Acquisition, & Use of Motor Vehicles
AR 190-11	02/01/00	Physical Security of Arms, Ammunitions And Explosives
AR 190-13	09/30/93	The Army Physical Security Program
AR 190-51	Sep 93	Security of Unclassified Army Property Sensitive and Non-sensitive
AR 200-1	Feb 97	Environmental Protection & Enhancement
AR 200-2	Dec 88	Environmental Effects of Army Actions
AR 200-3	2/28/95	National Resources – Land, Forest and Wildlife Management
AR 200-5	10/29/99	Pest Management
AR 210-50	2/26/99	Housing Management
AR 380-5		DA Info Security Program
AR 385-10	2/29/00	Army Safety Program
AR 385-40	11/01/94	Accident Reporting and Records
AR 385-55	Mar 87	Prevention of Motor Vehicle Accidents
AR 385-64	02/01/00	U.S. Army Explosives Safety Program
AR 405-45	06/30/00	Real Property Inventory Management
001	06/30/00	Real Property Inventory Management
002	06/30/00	Real Property Inventory Management
AR 415-28	Oct 96	Real Property Category Codes
AR 420-10	Apr 97	Management of Installation

		Directorates of Public Works
AR 420-16	Sep 87	Facilities Engineering Reports
AR 420-46	May 92	Water and Sewer
AR 420-49	Apr 97	Utility Services
AR 420-70	10/10/92	Buildings & Structures
AR 420-12	Mar 91	Surfaced Areas, Railroads & Associates Appurtenances
AR 420-46	May 92	Water and Sewage
AR 420-90	Sep 97	Fire and Emergency Services
AR 700-141	Jul 97	Hazardous Material Information System
AR 735-5	06/10/02	Policies and Procedures of Property Accountability
AR 750-1	07/01/96	Army Materiel Maintenance Policy & Retail Maintenance Operations
AR 750-43	11/28/97	Army Test, Measurement & Diagnostic Equipment Program

6.1.2. Army Pamphlets. www.usapa.army.mil

NO.	DATE	TITLE
DA Pam 200-1	2/21/97	Environmental Protection and Enhancement
DA Memo 385-3	06/07/01	HQDA MACOM Safety Program
DA Pam 385 61		Safety, Toxic Chemical Agent Safety Standard Code of Federal Regulations, 29 CFR 1910-146 Confined Space
DA Pam 385-64	12/15/99	Ammunition and Explosive Safety Standard
DA Pam 420-6	05/15/97	Directorate of Public Works Resource Management System
DA Pam 738-750	Aug 94	Functional Users Manual for the Army Maintenance Management System (TAMMS)

6.1.3. Technical Manuals. www.usace.army.mil/inet/usace-docs/
www.usapa.army.mil

NO.	DATE	TITLE
TM 5-551K	Jul 71	Plumbing and Pipefitting

TM 5-600	Dec 94	Bridge Inspection, Maintenance and Repair
TM 5-610	Nov 79	Preventative Maintenance for Facilities Engineering, Buildings and Structures
TM 5-611	Oct 60	Repairs & Utilities: Post Engineer Shops
TM 5-617	Jan 74	Facilities Engineering: Maintenance, and Repair of Roofs
TM 5-618	Jun 81	Paints & Protective Coatings
TM 5-620	May 90	Facilities Engineering Maintenance and Repair of Architectural and Structural Elements of Buildings and Structures
TM 5-622	Nov 82	Wharfs and Shore Structures
TM 5-623	Nov 82	Pavement Maintenance Management
TM 5-624	10/27/95	Maintenance and Repairs of Surfaced Areas
TM 5-630	Jul 82	Natural Resources – Land Management
TM 5-631	Feb 81	Natural Resources – Forest Management
TM 5-632 00 002	Dec 71	Military Entomology Operational Handbook (Incl. C 1-2)
TM 5-636	Jul 46	Kitchen Equipment: Repair and Utilities
TM 5-640	Jun 46	Ranges, Bake Ovens and Burners for Mess Equipment, Repairs and Utilities
TM 5-650	Oct 89	Central Boiler Plants
TM 5-652	Apr 47	Steam, Hot Water, and Gas Distribution: Systems Repair and Utilities
TM 5-653	Jun 46	Steam, Hot Water, and Gas Distribution Systems: Inspection, and Preventive Maintenance Service
TM 5-670	Feb 62	Repairs & Utilities for Refrigeration, Air-Conditioning, Mechanical Ventilation, and Evaporative Cooling
TM 5-671	Aug 58	Repairs & Utilities for Preventive Maintenance for Refrigeration, Air-Conditioning, Mechanical Ventilation and Evaporative Cooling
TM 5-682	01/18/99	Facilities Engineering: Electrical Facilities Safety
TM 5-683	Dec 95	Facilities Engineering, Electrical Interior Facilities

TM 5-684	Nov 96	Facilities Engineering Electrical Exterior Facilities
TM 5-803-1	Jun 86	Installation Master Planning
TM 5-805-6	Sep 94	Joint Sealing for Buildings
TM 5-805-8	Jan 92	Builders Hardware
TM 5-810-5	Aug 93	Plumbing
TM 5-811-1 TM 5-811-2	Feb 95 Sep 83 Sep 84	Electric Power Supply & Dist. Electrical Design, Interior Electrical System (Incl. C1)
TM 5-811-3	Mar 85	Electrical Design, Lightning and Static Electricity Protection
TM 5-813-1	Jun 87	Water Supply: Sources & General Considerations
TM 5-813-3	Sep 85	Water Supply, Water Treatment
TM 5-813-4	Sep 85	Water Supply, Water Storage
TM 5-813-5	Nov 86	Water Supply, Water Distribution
TM 5-814-1	Mar 85	Sanitary Industrial Wastewater Collection; Gravity Sewers and Appurtenances
TM 5-814-3	Aug 88	Domestic Wastewater Treatment
TM 5-814-8	Apr 87	Evaluation Criteria Guide for Water Pollution Prevention Control & Abatement Programs
TM 5-818-4	Jun 83	Backfill for Subsurface Structures
TM 5-820-4	Oct 83	Drainage for Areas Other than Airfields (Incl. C1)
TM 5-822-2	07/14/87	General Provision and Geometric Design for Roads, Streets, Walks, and Open Storage Areas
TM 5-822-7	Aug 87	Standard Practice for Concrete Pavements
TB MED 576	Mar 82	Sanitary Control and Surveillance of Water Supplies at Fixed Installations

6.1.4. Engineering Manuals.

NO.	DATE	TITLE
EM 385-1-1	Sep 96	Safety and Health Requirements Manual

6.1.5. Commercial Standards. Available from Standards Societies Listed.

NO./DATE	**TITLE**
ANZI-Z60.1	American Standard for Nursery

	Stock Available from: American Association of Nurserymen, In, 230 Southern Bldg., Washington, DC 20005
Latest Edition	National Arborist Association Standards for Pruning and Maintaining Shade Trees Available from: National Arborist Association, 3537 Stratford Road, Wantagh, NY 11793, Phone: 513-221-3082
Latest Edition	North Carolina State Building Code
Latest Edition	Manual of Uniform Control Devices For Streets and Highways (MUTCD) Available from Supt. Of Documents, U.S. Government Printing Office Washington, DC 20402
Latest Edition	Highway Safety Program Standards GFIM Volumes 12 (Highway Design, Construction and Maintenance), 13 (Traffic Engineering and Services), and 14 (Pedestrian Safety) – Available from: Department of Transportation, Federal Highway Administration, Washington, DC 20590
Latest Edition	State of North Carolina Department of Transportation Highway Standards and Procedures

Latest Edition	ASSHTO Manual for Maintenance Inspection of Bridges Available from Supt. of Documents, US. Govt. Printing Office, Washington, DC 20402
ANSI/IEEE STD 142	Practice for Grounding of Industrial & Commercial Power Systems
ANSI/NFPA 70	National Electrical Code
NFPB 70 B	Electrical Equipment Maintenance
ANSI C2	National Electrical Safety Code
I EE STD 64	Guide for Acceptance and Maintenance. of Insulating Oil in Equipment
ANSUNEMA TR5	Guide for the Installation and Maintenance of Oil-immersed Transformers (Appendix to ANSI C57.12 Standards)
ANSI C57.94	Guide for Installation and Maintenance of Dry-Type Transformers (Appendix to ANSI C57.12 Standards)
NFPA – 72	National Fire Alarm Code
NFPA – 101	Life Safety Code

6.1.6. Water Pollution Control Federation (WPCF) Manuals.
(www.wef.org) Water Environment Federation

6.1.7. SDDC Regulations.

NO.	DATE	TITLE
37-2	Feb 04	Transportation Financial Management System – Military Surface Deployment and Distribution Command Financial Administration Budget and Cost Accounting and Reporting Responsibilities

6.1.8. MOTSU Regulations.

NO.	DATE	TITLE
1-1	Apr 93	Commander's Policy Book
P-25-30	June 03	Index of Publications
56-1	Jan 94	Dispatch and Inspection of Materials Handling Equipment and Cranes
56-2	Feb 86	Equipment Utilization
190-1	Jul 93	Motor Vehicle Traffic Supervision

190-2	Mar 93	Access Control
200-1	Feb 81	Weather Warnings – Protection of Installation Personnel Equipment and Property
200-4	Nov 02	Hazardous Material/Hazardous Waste Management
210-3	Dec 85	Control, Issue and Security of Locks and Keys
380-2	Dec 81	Evacuation of Safeguarding of Classified Material
381-1	Apr 75	Subversion and Espionage Directed Against US Army and Deliberate Security Violations (SAEDA)
385-1	Jan 85	Command Safety Program
385-4	Apr 84	Protective Clothing and Equipment
385-7	Mar 82	Use of MOTSU Storage Location and Fire Symbol Boards
420-1	Jan 86	Delivery of Fresh Water to Ships
420-5	Jun 94	Energy Conservation Program
420-6	Nov 86	Safety Precautions in the Handling of Pesticide
420-9	Mar 86	Environmental Protection and Enhancement
715-5	Jun 03	Contractors Performing Incidental Services
735-1	Dec 79	Reporting of Loss, Damage or Destruction of Government-owned Property

6.1.9 MOTSU Plans.

Title

Installation Pest management Plan

Installation Spill Contingency Plan (ISCP)

Spill Prevention, Control and Countermeasure Plan (SPCCP)

Solid Waste Management Plan (SWMP)

Cross Connection Control Plan (CCCP)

Stormwater Pollution Prevention Plan (SWPPP)

Water System Flushing Plan (WSFP)

Water Resources Management Plan (WRMP)

Integrated Natural Resource Management Plan (INRMP)

Integrated Cultural Resources Management Plan (ICRMP)

6.1.10. Public Law

NO./DATE	TITLE
PL 91-190 1 Jan 70	National Environmental Policy Act of 1969
PL 92-396	Federal Pesticide Control Act
PL 92-516 21 Oct 72	Federal Environmental Pesticide Control Act of 1972
PL 93-205 28 Dec 73	Endangered Species Act of 1973
PL 94-580 21 Oct 76	1976 Resource Conservation and Recovery Act (RCRA)
PL 104-170	Food Quality Protection Act of 1996.

6.1.11. Executive Orders/White House Memorandum.
www.archives.gov/federa-register/executive-orders/

NO./DATE	TITLE
Executive Order EO12342	Environmental Safeguards
Executive Order EO12088	Federal Compliance with Pollution Control Standards Revoked in part by EO 13148, See EO 12217

Executive Order EO12088	Prevention, Control, and Abatement of Environmental Pollution at Federal Installations.

White House Memorandum of 26 April 1994 entitled Environmentally and Economically Beneficial Practices on Federal Landscape Grounds.

6.1.12. Federal Regulations and Standards.
www.access.gpo.gov/ecfr/

NO./DATE	TITLE
40 CFR Part 490 5 Jul 79	Emergency Building Temperature Restrictions (44 FR 39354)
40 CFR Part 761 31 May 79	EPA Final Rule. Polychlorinated Biphenyl's (PCB's) Manufacturing, Processing, Distribution in Commerce and Use Prohibitions
49 CFR Parts 200 1 Oct 94 to 399	Transportation – Federal Railroad Administration
EPA Document Nov 88	Federal Facilities Compliance "Yellow Book" Strategy www.epa.gov/compliance/resources/publications/civil/federal/yellowbk.pdf

The requirements of Department of Labor, Occupational Safety and Health Administration (OSHA) Standards.

29 Dec 70	Occupational Safety and Health Act (OSHA) www.osha.gov/com-links.html
	Federal Specification SS S1401 Sealing Compound. Hot Applied for Concrete and Asphalt Pavements
Title 33 1984	Coast Guard Regulation: Navigation In Navigable Waters
24 Jun 77	National Interim Drinking Water Regulations
Dec 75	National Interim Secondary Drinking Water Regulations
ASTM D-923 D-877 D-1534 D-1524	
FED-STD-368A	Quality Control System Requirements
	USDA Farmer's Bulletin #2250. Pond Management. Federal Compliance W/Pollution Control Standards (Section 5.8.2.4) 13 Oct 73

6.1.13. Other.

AFPMB TIM No. 14, Protective Equipment for Pest Control Personnel.

AFPMB TIM No. 15, Pesticide Spill Prevention and Management

AFPMB TIM No. 16, Pesticide Fires; Prevention, Control, and Clean-Up

AFPMB TIM No. 20, Pest Management Operations in Medical Treatment Facilities

AFPMB TIM No. 29, Integrated Pest Management for General Use Buildings

AFPMB TIM No. 37, Guidelines for Reducing Feral/Stray Cat Populations on Military Installations in the United States.

AFPMB Military Pest Management Handbook, Army TM 5-637

AFPMB Herbicide Manual, Army TM-5-629

AMC R 385-100 Safety Manual

DoD 4145.26M Contractor Safety Manual for Ammunition & Explosives

DoD Directive 4150.7 Department of Defense Pest Management